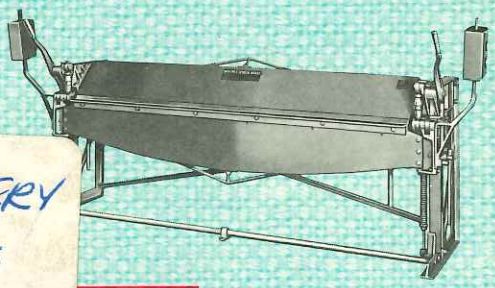
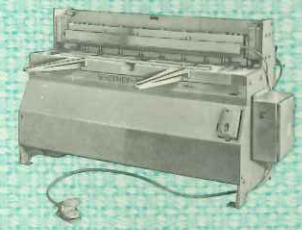
CATALOG No. 1967

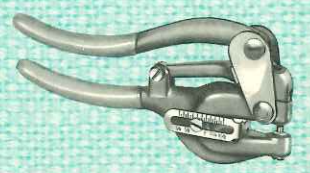


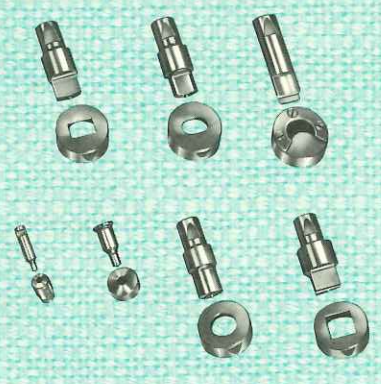
Machinery Box

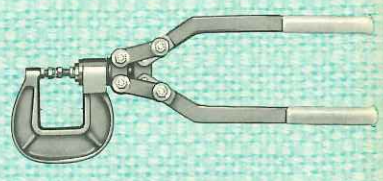
WHITNEY-JENSEN

METAL WORKING TOOLS AND MACHINERY



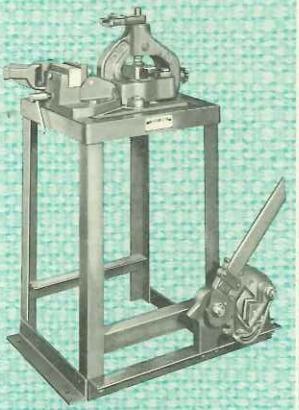




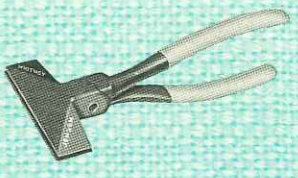


PUNCHES • SHEARS
FOOT PRESSES • FOOT SHEARS
BENDING BRAKES • POWER PRESSES
POWER SHEARS • DIES • SMALL TOOLS

Recd. 4/19/67



WHITNEY METAL TOOL COMPANY
ROCKFORD, ILLINOIS 61101, U. S. A.
PHONE: AREA 815 962-5571



WHITNEY METAL TOOL COMPANY

LOCATION OF OFFICE AND FACTORY, 724 FORBES STREET, ROCKFORD, ILLINOIS 61101.

TELEPHONE — AREA CODE 815 — 962-5571
Rockford Illinois is located approximately 90 miles northwest of Chicago, Illinois.

TIME — Central Standard in the Winter, Central Daylight in the Summer.
(Changes last Sunday in April, and last Sunday in October.)

MINIMUM CHARGE ORDER $1.50

TERMS: All prices net, f.o.b. factory.

CASH DISCOUNTS: 1% 10th and 25 Proc., Net 30 days.

WEIGHTS: All weights shown are shipping weights.

DELIVERY:
Stock Items: Normal shipment 2 days, subject to prior sale.
Non-Stock Items: Contact factory for delivery schedule.

CLAIMS: All claims for stortages must be made 10 days after receipt of invoice.

RETURN MERCHANDISE POLICY

The following is Whitney Metal Tool Company policy on merchandise returned:

1. Merchandise returned will not be accepted without prior written authorization.

2. Merchandise will not be accepted if the merchandise is not properly packed.

3. Credit will not be allowed on merchandise that has been used or has been damaged as outlined in our Standard Warranty and subject to our inspection.

4. All shipments to Whitney Metal Tool Company must be shipped prepaid unless prior written authorization has been issued.

5. A re-stocking charge on returned merchandise with an invoice value of the following: Under $50.00 will be 20%, over $50.00 will be 10% of the invoice value.

6. Tools and machines returned to the factory for repairs will be accepted without prior written notice. However, repairs will not be made without receipt of formal purchase order.

If the tool or machine will require extensive repairs, the factory will notify the customer of the approximate cost of such repairs. Authorization for the repairs must be received by the factory before the necessary repairs will be made.

Minor repairs will be made by the factory without notification to the customer.

WARRANTY

Whitney Metal Tool Company Tools and Machines are guaranteed against defects in material and workmanship. If a part breaks within one year because of defects in the material or poor workmanship, it will be replaced free of charge. This does not apply to perishable tooling. Perishable tooling life depends on the use and care.

We assume no responsibility for damages for repairs when the work or replacement parts are not Whitney Metal Tool Company's genuine replacement parts, or work that has not been authorized by Whitney Metal Tool Company.

INDEX

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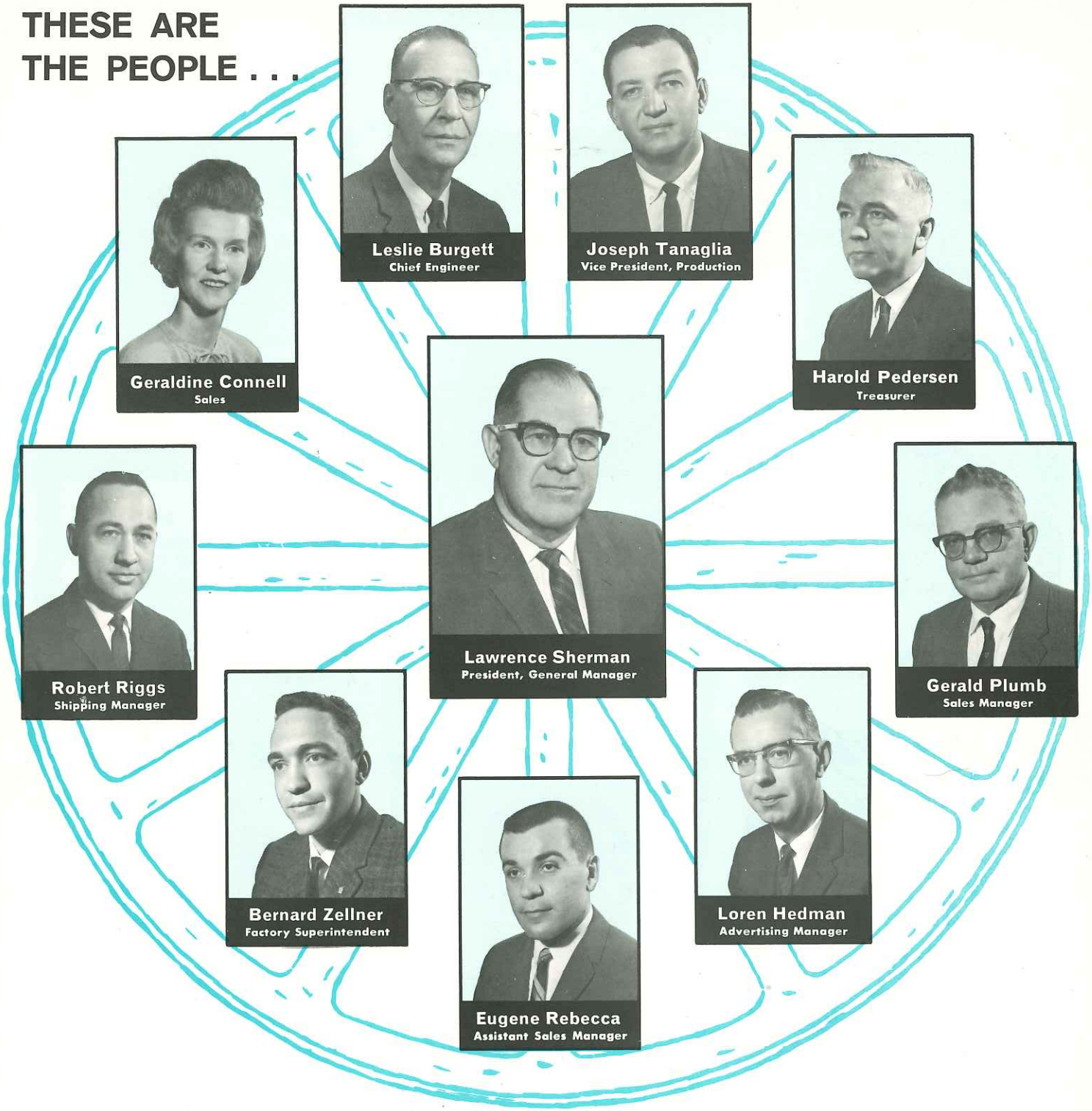
Bench Punches	17 thru 24	Shears and Notchers	64 thru 70
Foot and Lever Presses	25 thru 27	Angle Iron Shears	72 thru 77
Power Punch Presses	28 thru 33	Hand Tools	79 thru 84
Cushion Pads	34	Special Applications	85, 86
Punches and Dies	35 thru 54	Useful Data	87, 88

Complete Index can be found on the inside of back cover.

THESE ARE THE PEOPLE . . .



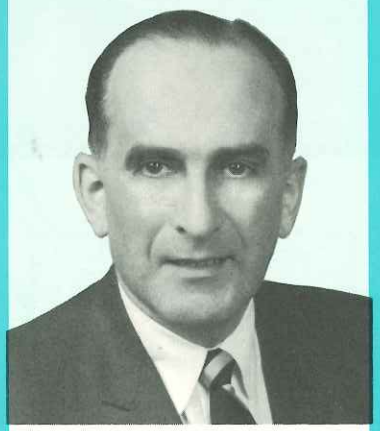
TO SPEAK WITH AT

WHITNEY-JENSEN

Want to place an order, or check on an order in process? Ask for Gerald Plumb, Gene Rebecca, or Gerry (Mrs.) Connell. — Got a billing or credit problem? Talk to Pete Pedersen. — Joe Tanaglia and Bernie Zellner are in charge of our production. — Bob Riggs routes our shipments. — Need literature, flyers, parts lists, ads? Loren Hedman is your man. — Technical problems, engineering details, can we make this-or-that? Call for Les Burgett (pronounced Burg'-it). — And, if you are in real trouble, consult our highest authority, Lawrence Sherman. — The telephone number is Area Code 815 962-5571.

WHITNEY METAL TOOL COMPANY, 724 FORBES ST., ROCKFORD, ILLINOIS 61101

WHITNEY METAL TOOL COMPANY products reach all corners of the world. Address any inquiries regarding export sales, direct to these men.



ADOLPH STERN
Pan American Trade Development Corp.
2 Park Ave.
New York, New York 10016

Colombia, Venezuela

JOSEPH F. DeMAY
J. H. O'Callaghan, Inc.
28 Water St.
New York, New York 10004

Union of South Africa

JOSE MERINO
Ferreteria - Merino, Inc.
700 Labra Ave.
Santurce, Puerto Rico

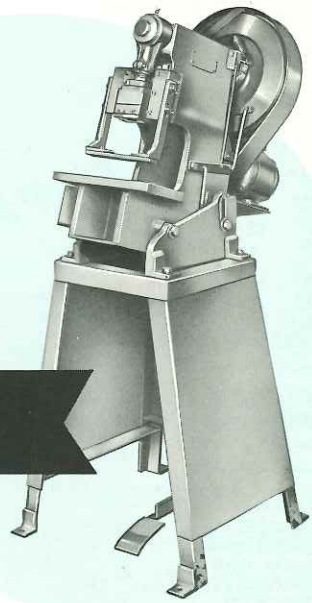
Puerto Rico

FRANK HAMPSON
James H. Vickery Co., Ltd.
Vulcan Works, Harrison Street
Manchester 4, England

British Isles

JULIUS V. CREMONIN
Export Department
Whitney Metal Tool Co.
Suite 606, 11 Broadway
New York, New York 10004

All Other Countries



ON THE
FOLLOWING PAGES

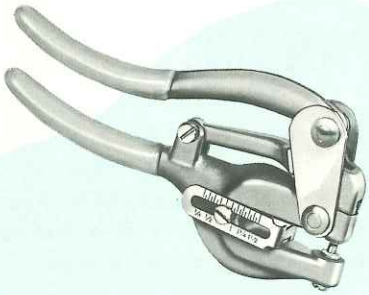
WHITNEY-JENSEN

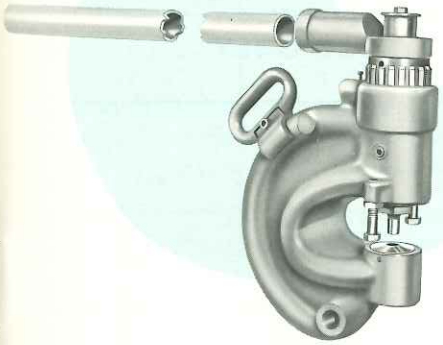
HAND PUNCHES

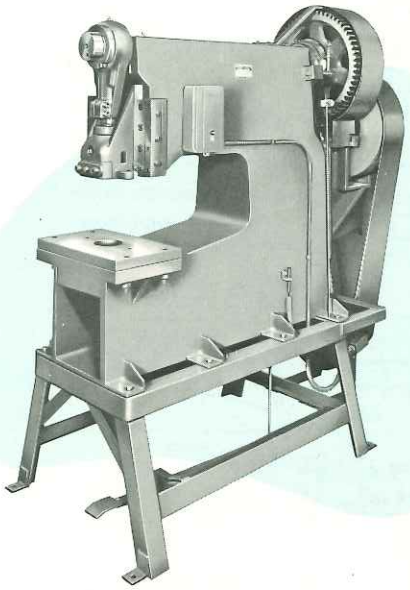
BENCH PUNCHES

POWER PRESSES

PUNCHES & DIES





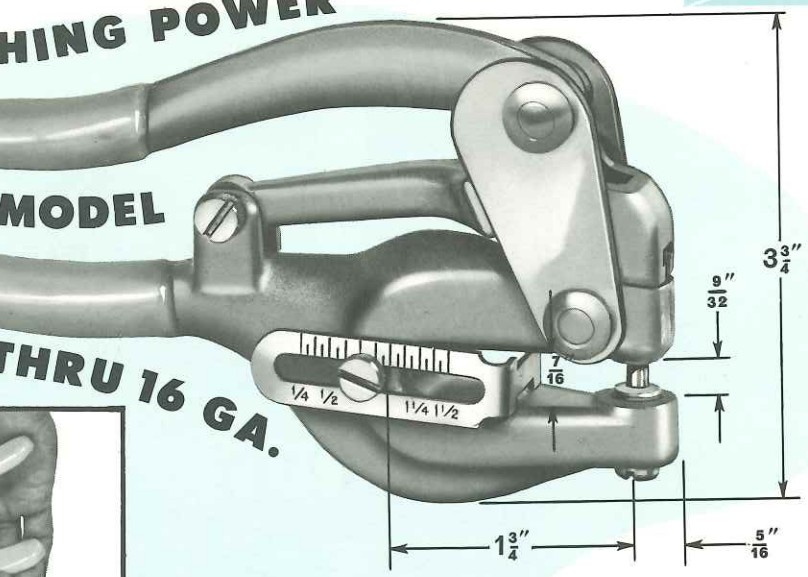


No. 5 Jr. HAND PUNCH

1 TON PUNCHING POWER

IMPROVED MODEL

CAPACITY 1/4" THRU 16 GA.



STANDARD ROUND PUNCH AND DIE SIZES

1/16"	3/16"
5/64"	13/64"
3/32"	7/32"
7/64"	15/64"
1/8"	1/4"
9/64"	17/64"
5/32"	9/32"
11/64"	

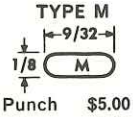
DRILL SIZES
No. 52 THRU K

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

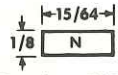
★ IF SMALLEST DIMENSION IS LESS THAN 1/8", PRICE QUOTED ON APPLICATION

TYPE M



Punch $5.00
Die 5.00

TYPE N



Punch $5.00
Die 5.00

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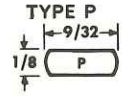
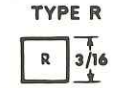


Punch $5.00
Die 5.00

TYPE R

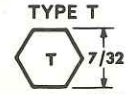


Punch $5.00
Die 5.00

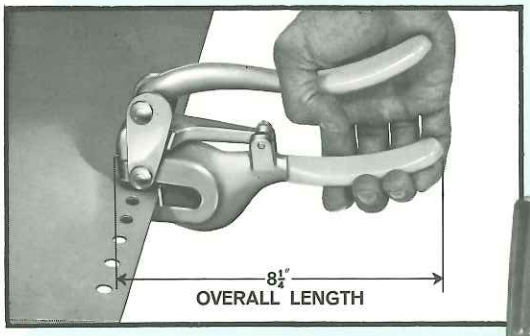
TYPE S

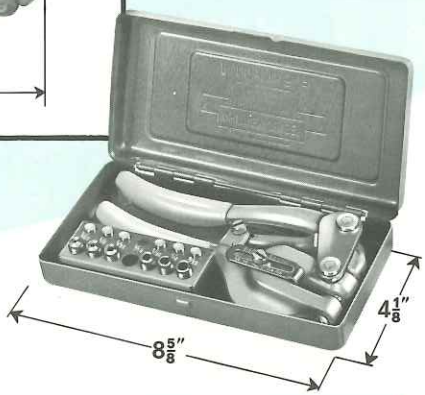
Punch $5.00
Die 5.00

TYPE T



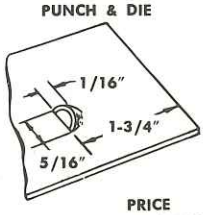
Punch $5.00
Die 5.00





SPECIAL APPLICATION PUNCHES AND DIES

No. 5 SNAP LOCK PUNCH & DIE



PRICE PER SET $5.00

Capacity 16 ga.

No. 5 BUTTON PUNCH & DIE

PRICE PER SET $3.00

Capacity 3 Thicknesses of 22 ga.

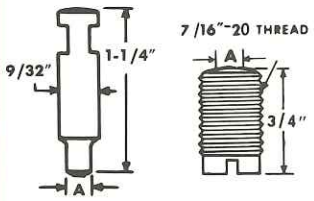
SPECIFICATIONS

Capacity	1/4" hole thru 16 ga. mild steel
Depth of Throat	1 3/4"
Space between Punch and Die	9/32"
Length Overall	8 1/4"
Weight of No. 5 Jr. only	2 3/4 lbs.
Weight of No. 5 Jr. in Metal Box	4 lbs.
Weight of No. 5 Jr. in Paper Box	3 lbs.

NET PRICES — F. O. B. FACTORY

❶ No. 5 Jr. Punch, in Metal Box	$13.50
❷ No. 5 Jr. Punch, in Paper Box	13.00
❸ No. 5 Jr. Punch, Tool Only	11.00
No. 5 Standard Round Punch or Die	.50
No. 5 Drill Size Punch or Die—No. 52 thru K	.75

DIMENSIONS OF PUNCHES AND DIES FOR No. 5 Jr. PUNCH



A—MIN. 1/16", MAX. 9/32"

No. 5 PUNCH & DIE

BENCH MOUNTING BASE FOR No. 5 Jr.

This Bench Mounting Base provides a convenient and secure bench vise for the No. 5 Jr. Punch. The Punch is held by an L-shaped clamp rod through a 7/16" or larger hole in the bench top. The base may be swiveled to any convenient position.

NET PRICE — F. O. B. FACTORY

Price No. 5 Jr. Bench Mounting Base	$3.75
Weight No. 5 Jr. Bench Mounting Base	3/4 lb.

THE No. 5 Jr. PUNCH MAY BE PURCHASED 3 WAYS

❶ IN METAL BOX

This includes the No. 5 Jr. Punch with one each 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", and 9/32" Round Punches and Dies in a compact metal box, as shown at left.

❷ IN PAPER BOX

This includes the No. 5 Jr. Punch with one each 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", and 9/32" Round Punches and Dies in a paper box.

❸ TOOL ONLY

This includes the No. 5 Jr. Punch with one each 3/16" Round Punch and Die in a paper wrapper.

No. 5 BENCH MOUNTING BASE

Additional Round, Drill Size, Irregular Shaped, and Special Application Punches and Dies — shown on the left-hand side of this page — are available from stock.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

WHITNEY No. XX DEEP THROAT HAND PUNCH JENSEN

STANDARD ROUND PUNCH AND DIE SIZES

1/16″	5/16″
5/64″	21/64″
3/32″	11/32″
7/64″	23/64″
1/8″	3/8″
9/64″	25/64″
5/32″	13/32″
11/64″	27/64″
3/16″	7/16″
13/64″	29/64″
7/32″	15/32″
15/64″	31/64″
1/4″	1/2″
17/64″	33/64″
9/32″	17/32″
19/64″	

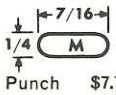
DRILL SIZES No. 52 THRU Z

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

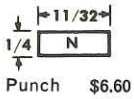
★ IF SMALLEST DIMENSION IS LESS THAN 1/8″, PRICE QUOTED ON APPLICATION

TYPE M



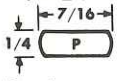
Punch $7.70
Die 5.50

TYPE N



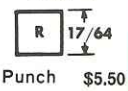
Punch $6.60
Die 5.50

TYPE P



Punch $7.70
Die 5.50

TYPE R

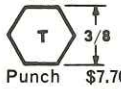


Punch $5.50
Die 5.50

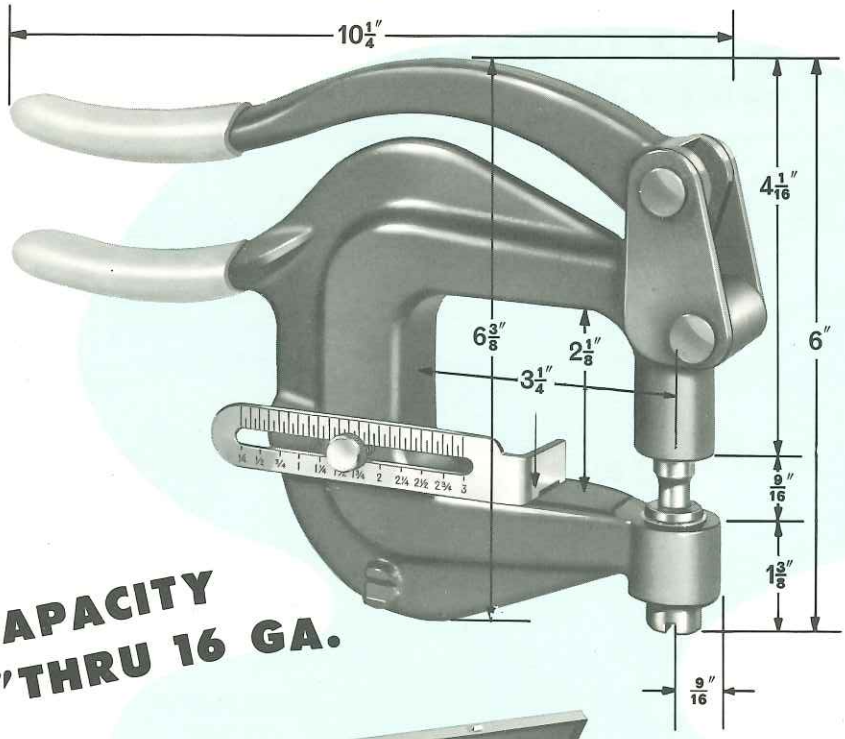
TYPE S

Punch $7.70
Die 5.50

TYPE T



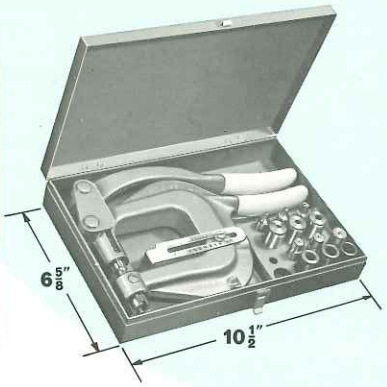
Punch $7.70
Die 5.50



CAPACITY 1/4″ THRU 16 GA.

1 TON PUNCHING POWER

- ✻ DEEP THROAT
- ✻ HIGH THROAT
- ✻ VERSATILE— CAN BE USED PORTABLE OR STATIONARY

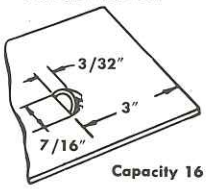


SPECIAL APPLICATION PUNCHES AND DIES

No. XX BUTTON PUNCH AND DIE

PRICE PER SET $3.30
Capacity 3 Thicknesses of 22 ga.

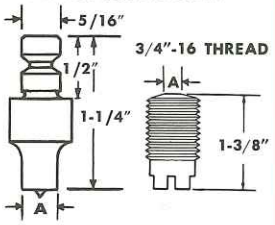
No. XX SNAP LOCK PUNCH AND DIE



Capacity 16 ga.

PRICE PER SET $5.50

DIMENSIONS OF PUNCHES AND DIES FOR No. XX PUNCH



A—MIN. 1/16″, MAX. 17/32″
No. XX PUNCH & No. 7 DIE

SPECIFICATIONS

Capacity	1/4″ hole thru 16 ga. mild steel
Depth of Throat	3¼″
Height of Throat	2⅛″
Space between Punch and Die	9/16″
Length Overall	10¼″
Weight of No. XX Punch only	6 lbs.
Weight of No. XX Punch in Metal Box	9½ lbs.

NET PRICES — F.O.B. FACTORY

❶ No. XX Punch in Metal Box	$35.75
❷ No. XX Punch only	27.00
No. XX Standard Round Punch or Die	.85
No. XX Drill Size Punch or Die . 52 thru Z	1.10

BENCH BASE

Price No. XX Bench Mounting Base	$ 5.50
Weight No. XX Bench Mounting Base	1⅛ lbs.

THE No. XX DEEP THROAT PUNCH MAY BE PURCHASED 2 WAYS

❶ IN METAL BOX

This includes the No. XX Deep Throat Hand Punch with one each 5/32″, 7/32″, 9/32″, 11/32″, 13/32″, 15/32″, and 17/32″ Round Punches and Dies in a compact metal box, as shown at left.

❷ TOOL ONLY

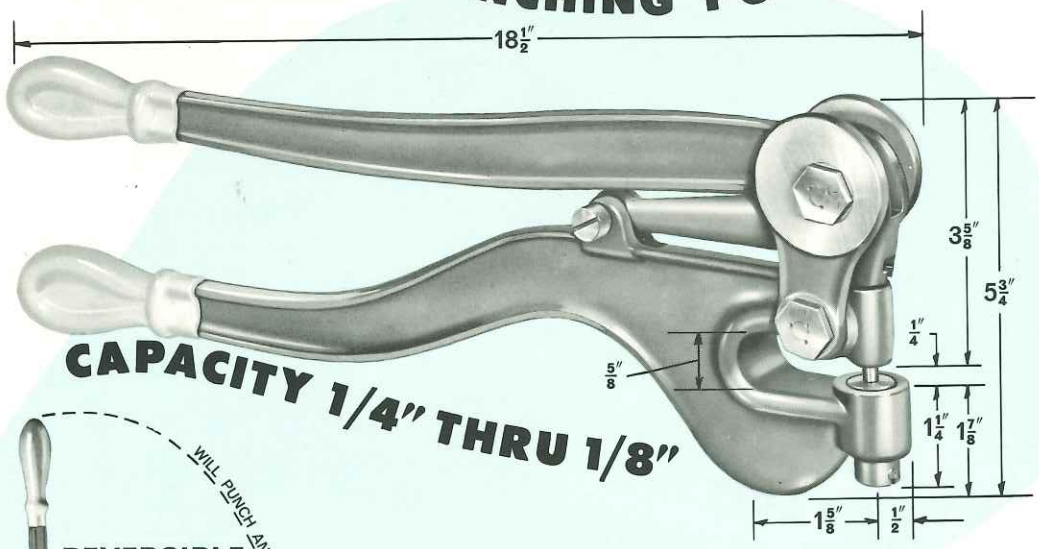
This includes the No. XX Deep Throat Hand Punch with one 9/32″ Round Punch and Die in a paper wrapper.

No. XX BENCH MOUNTING BASE

Additional Round, Drill Size, Irregular Shaped, and Special Application Punches and Dies — shown on the left-hand side of this page — are available from stock.

No. 7 ROLLER BEARING PUNCH

2-1/2 TONS PUNCHING POWER



CAPACITY 1/4" THRU 1/8"

STANDARD ROUND PUNCH AND DIE SIZES

1/16"	17/64"
5/64"	9/32"
3/32"	19/64"
7/64"	5/16"
1/8"	21/64"
9/64"	11/32"
5/32"	23/64"
11/64"	3/8"
3/16"	25/64"
13/64"	13/32"
7/32"	27/64"
15/64"	7/16"
1/4"	

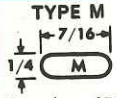
DRILL SIZES No. 52 THRU Z

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

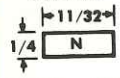
★ IF SMALLEST DIMENSION IS LESS THAN 1/8", PRICE QUOTED ON APPLICATION

TYPE M



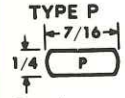
Punch $7.70
Die 5.50

TYPE N



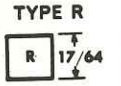
Punch $6.60
Die 5.50

TYPE P



Punch $7.70
Die 5.50

TYPE R

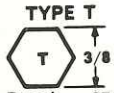


Punch $5.50
Die 5.50

TYPE S

Punch $7.70
Die 5.50

TYPE T



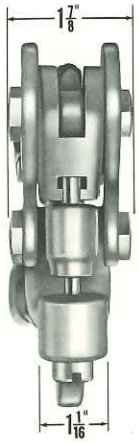
Punch $7.70
Die 5.50

REVERSIBLE HANDLE

The Upper Handle will be reversed at the factory upon request, and the tool can then be used as a Bench Punch with the Bench Mounting Base.

THREE PUNCHES AND DIES

The No. 7 Roller Bearing Punch is furnished with one each Round 5/32", 7/32" and 9/32" Punch and Die.

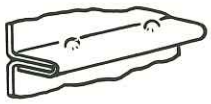


No. 7 BENCH MOUNTING BASE

To permit its use as a fixed bench tool, the Punch can be clamped in this Base. Table, 3" x 5", has 10 tapped holes for stops.

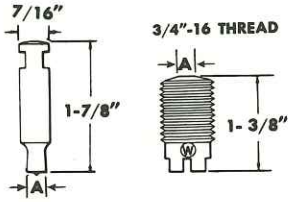
SPECIAL APPLICATION PUNCH AND DIE

No. 7 BUTTON PUNCH & DIE



PRICE PER SET $3.30
Capacity 3 Thicknesses of 20 ga.

DIMENSIONS OF PUNCHES AND DIES FOR No. 7 PUNCH



No. 7 PUNCH & DIE

SPECIFICATIONS

Capacity	1/4" hole thru 1/8" mild steel
Depth of Throat	1 5/8"
Space between Punch and Die	1/4"
Length Overall	18 1/2"
Weight	7 1/2 lbs.

NET PRICES — F. O. B. FACTORY

No. 7 Roller Bearing Punch	$27.50
No. 7 Standard Round Punch	.85
No. 7 Standard Round Die	.85
No. 7 Drill Size Punch—No. 52 thru Z	1.10
No. 7 Drill Size Die — No. 52 thru Z	1.10

BENCH MOUNTING BASE

Price No. 7 Bench Mounting Base	$11.00
Weight No. 7 Bench Mounting Base	5 1/2 lbs.

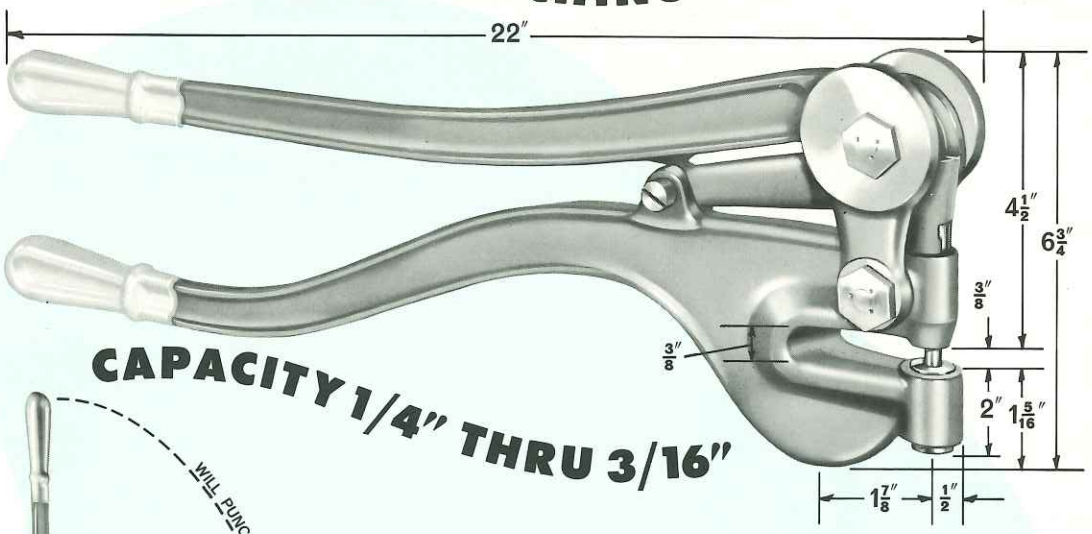
WHITNEY-JENSEN Roller Bearing Punches are famous for ease of operation, good punching power, and versatility. They function on the eccentric-lever principle, with roller bearings reducing friction to a minimum. Leverage is calculated to provide sufficient power to punch up to full capacity without undue effort on the operator's part. Dimensions are such that the tool will punch and strip positively inside a right-angle corner. The upper handle will not become disengaged by moving too far in either direction, and is reversible for bench use with the Bench Mounting Base.

Additional Round, Drill Size, Irregular Shaped and Special Application Punches and Dies — shown on the left hand side of this page — are available from stock.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. 7½ ROLLER BEARING PUNCH

3-1/2 TONS PUNCHING POWER



CAPACITY 1/4″ THRU 3/16″

STANDARD ROUND PUNCH AND DIE SIZES

1/16″	19/64″
5/64″	5/16″
3/32″	21/64″
7/64″	11/32″
1/8″	23/64″
9/64″	3/8″
5/32″	25/64″
11/64″	13/32″
3/16″	27/64″
13/64″	7/16″
7/32″	29/64″
15/64″	15/32″
1/4″	31/64″
17/64″	1/2″
9/32″	

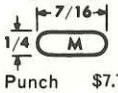
DRILL SIZES No. 52 THRU Z

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

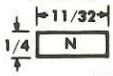
★ IF SMALLEST DIMENSION IS LESS THAN 1/8″, PRICE QUOTED ON APPLICATION

TYPE M



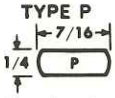
Punch $7.70
Die 5.50

TYPE N



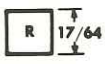
Punch $6.60
Die 5.50

TYPE P



Punch $7.70
Die 5.50

TYPE R

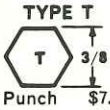


Punch $5.50
Die 5.50

TYPE S

Punch $7.70
Die 5.50

TYPE T



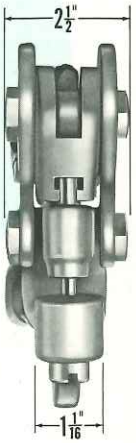
Punch $7.70
Die 5.50

REVERSIBLE HANDLE

The Upper Handle will be reversed at the factory upon request, and the tool can then be used as a Bench Punch with the Bench Mounting Base.

THREE PUNCHES AND DIES

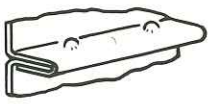
The No.7½ Roller Bearing Punch is furnished with one each Round 7/32″, 9/32″, and 11/32″ Punch and Die.



No. 7½ BENCH MOUNTING BASE

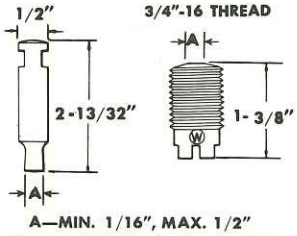
To permit its use as a fixed bench tool, the Punch can be clamped in this Base. Table, 3½″ x 5″, has 8 tapped holes for stops.

SPECIAL APPLICATION PUNCH AND DIE
No. 7½ BUTTON PUNCH AND DIE



PRICE PER SET $3.85
Capacity 3 Thicknesses of 20 ga.

DIMENSIONS OF PUNCHES AND DIES FOR No. 7-1/2 PUNCH



A—MIN. 1/16″, MAX. 1/2″
No. 8 PUNCH & No. 7 DIE

SPECIFICATIONS

Capacity	¼″ hole thru 3/16″ mild steel
Depth of Throat	1⅞″
Space between Punch and Die	⅜″
Length Overall	22″
Weight	10½ lbs.

NET PRICES — F. O. B. FACTORY

No. 7½ Roller Bearing Punch	$33.00
No. 8 Standard Round Punch	1.10
No. 7 Standard Round Die	.85
No. 8 Drill Size Punch—No. 52 thru Z	1.40
No. 7 Drill Size Die — No. 52 thru Z	1.10

BENCH MOUNTING BASE

Price No. 7½ Bench Mounting Base	$12.00
Weight No.7½ Bench Mounting Base	6 lbs.

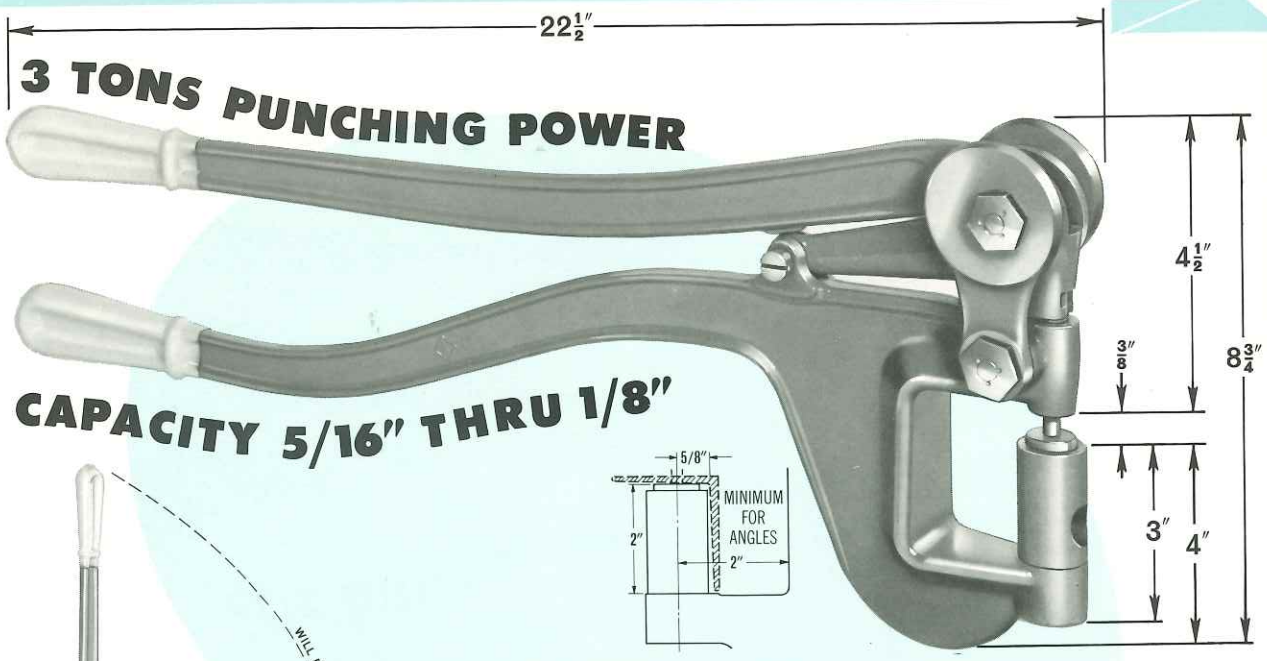
WHITNEY-JENSEN Roller Bearing Punches are famous for ease of operation, good punching power, and versatility. They function on the eccentric-lever principle, with roller bearings reducing friction to a minimum. Leverage is calculated to provide sufficient power to punch up to full capacity without undue effort on the operator's part. Dimensions are such that the tool will punch and strip positively inside a right-angle corner. The upper handle will not become disengaged by moving too far in either direction, and is reversible for bench use with the Bench Mounting Base.

Additional Round, Drill Size, Irregular Shaped and Special Application Punches and Dies — shown on the left hand side of this page — are available from stock.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

3 TONS PUNCHING POWER

CAPACITY 5/16" THRU 1/8"



STANDARD ROUND PUNCH AND DIE SIZES

3/32"	5/16"
7/64"	21/64"
1/8"	11/32"
9/64"	23/64"
5/32"	3/8"
11/64"	25/64"
3/16"	13/32"
13/64"	27/64"
7/32"	7/16"
15/64"	29/64"
1/4"	15/32"
17/64"	31/64"
9/32"	1/2"
19/64"	

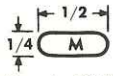
DRILL SIZES No. 52 THRU Z

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

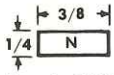
★ IF SMALLEST DIMENSION IS LESS THAN 1/8", PRICE QUOTED ON APPLICATION

TYPE M



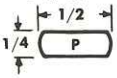
Punch $7.70
Die 5.80

TYPE N



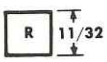
Punch $6.60
Die 5.50

TYPE P



Punch $7.70
Die 5.80

TYPE R

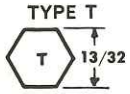


Punch $5.50
Die 5.50

TYPE S

Punch $7.70
Die 5.80

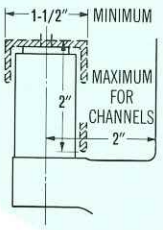
TYPE T

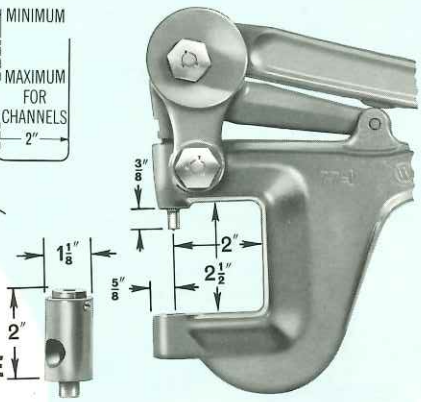


Punch $7.70
Die 5.80

REVERSIBLE HANDLE

The Upper Handle will be reversed at the factory upon request, and the tool can then be used as a Bench Punch with the Bench Mounting Base.





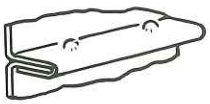
No. 77 BENCH MOUNTING BASE

To permit its use as a fixed bench tool, the Punch can be clamped in this Base.

THREE PUNCHES AND DIES

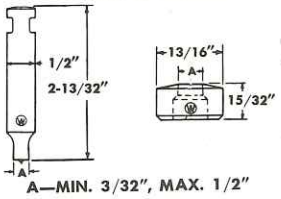
The No. 77 Deep Throat Channel Punch is furnished with one each Round 7/32", 9/32", and 11/32" Punch and Die.

SPECIAL APPLICATION PUNCH AND DIE
No. 77 BUTTON PUNCH AND DIE



PRICE PER SET — $4.40
Capacity 3 Thicknesses of 20 ga.

DIMENSIONS OF PUNCHES AND DIES FOR No. 77 PUNCH



A—MIN. 3/32", MAX. 1/2"
No. 8 PUNCH & No. 10 DIE

SPECIFICATIONS

Capacity	5/16" hole thru ⅛" mild steel
Depth of Throat	2"
Space between Punch and Die	⅜"
Length Overall	22½"
Weight	12 lbs.

NET PRICES — F.O.B. FACTORY

No. 77 Deep Throat Channel Punch	$38.50
No. 8 Standard Round Punch	1.10
No. 10 Standard Round Die	.85
No. 8 Drill Size Punch — No. 52 thru Z	1.40
No. 10 Drill Size Die — No. 52 thru Z	1.10

BENCH MOUNTING BASE

No. 77 Bench Mounting Base	$7.70
Weight of No. 77 Bench Mounting Base	6¼ lbs.

The No. 77 Deep Throat Channel Punch combines all the features of the Portable Roller Bearing Hand Lever Punches plus a removable high Die Holder, useful in punching channels and angles. Where working areas are limited, the removable Die Holder may be taken off and the No. 77 Deep Throat Channel Punch positioned. Following this positioning, the removable Die Holder may be reassembled and the punching operation completed.

Additional Round, Drill Size, Irregular Shaped, and Special Application Punches and Dies — shown on the left hand side of this page — are available from stock.

No. 8 ROLLER BEARING PUNCH

STANDARD ROUND PUNCH AND DIE SIZES

1/16″	19/64″
5/64″	5/16″
3/32″	21/64″
7/64″	11/32″
1/8″	23/64″
9/64″	3/8″
5/32″	25/64″
11/64″	13/32″
3/16″	27/64″
13/64″	7/16″
7/32″	29/64″
15/64″	15/32″
1/4″	31/64″
17/64″	1/2″
9/32″	

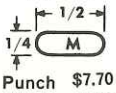
DRILL SIZES No. 52 THRU Z

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

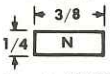
★ IF SMALLEST DIMENSION IS LESS THAN 1/8″, PRICE QUOTED ON APPLICATION

TYPE M



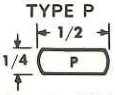
Punch $7.70
Die 5.50

TYPE N



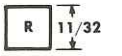
Punch $6.60
Die 5.50

TYPE P



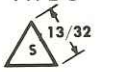
Punch $7.70
Die 5.50

TYPE R



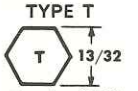
Punch $5.50
Die 5.50

TYPE S

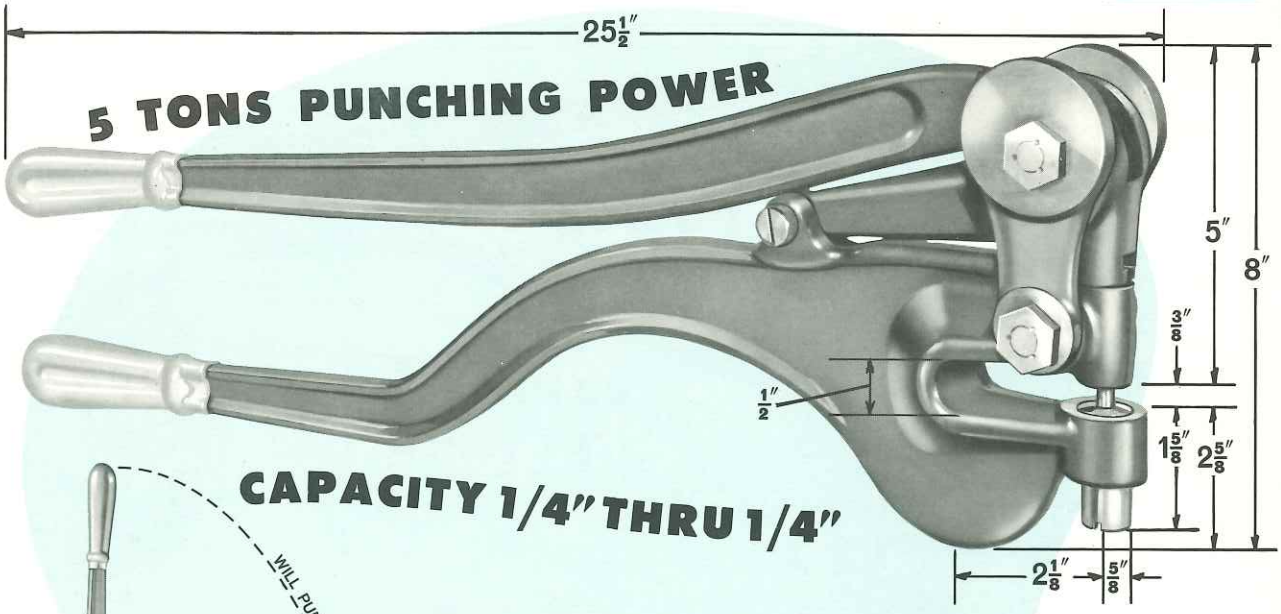


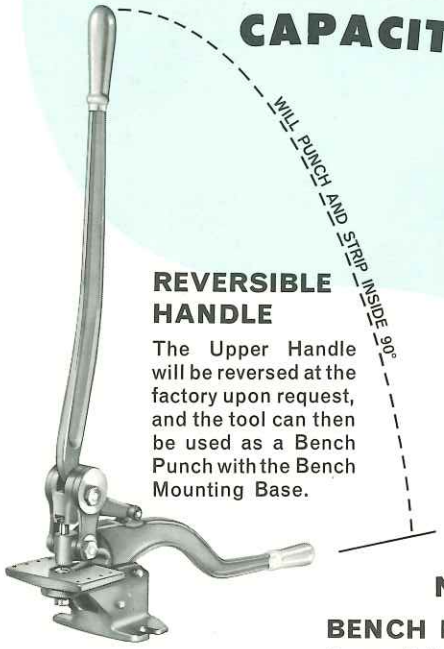
Punch $7.70
Die 5.50

TYPE T



Punch $7.70
Die 5.50



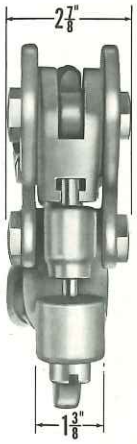


REVERSIBLE HANDLE

The Upper Handle will be reversed at the factory upon request, and the tool can then be used as a Bench Punch with the Bench Mounting Base.

THREE PUNCHES AND DIES

The No. 8 Roller Bearing Punch is furnished with one each Round 7/32″, 9/32″, and 11/32″ Punch and Die.

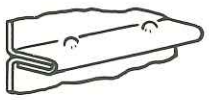


No. 8 BENCH MOUNTING BASE

To permit its use as a fixed bench tool, the Punch can be clamped in this Base. Table, 3¾″ x 5″, has 8 tapped holes for stops.

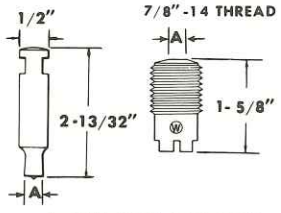
SPECIAL APPLICATION PUNCH AND DIE

No. 8 BUTTON PUNCH & DIE



PRICE PER SET $4.40
Capacity 3 Thicknesses of 18 ga.

DIMENSIONS OF PUNCHES AND DIES FOR No. 8 PUNCH



A—MIN. 1/16″, MAX. 1/2″
No. 8 PUNCH & DIE

SPECIFICATIONS

Capacity	¼″ hole thru ¼″ mild steel
Depth of Throat	2⅛″
Space between Punch and Die	⅜″
Length Overall	25½″
Weight	17½ lbs.

NET PRICES — F. O. B. FACTORY

No. 8 Roller Bearing Punch	$38.50
No. 8 Standard Round Punch	1.10
No. 8 Standard Round Die	1.10
No. 8 Drill Size Punch — No. 52 thru Z	1.40
No. 8 Drill Size Die — No. 52 thru Z	1.40

BENCH MOUNTING BASE

Price No. 8 Bench Mounting Base	$13.20
Weight No. 8 Bench Mounting Base	8½ lbs.

WHITNEY-JENSEN Roller Bearing Punches are famous for ease of operation, good punching power, and versatility. They function on the eccentric-lever principle, with roller bearings reducing friction to a minimum. Leverage is calculated to provide sufficient power to punch up to full capacity without undue effort on the operator's part. Dimensions are such that the tool will punch and strip positively inside a right-angle corner. The upper handle will not become disengaged by moving too far in either direction, and is reversible for bench use with the Bench Mounting Base.

Additional Round, Drill Size, Irregular Shaped and Special Application Punches and Dies — shown on the left hand side of this page — are available from stock.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. 10 BALL BEARING PUNCH

STANDARD ROUND PUNCH AND DIE SIZES

3/32″	5/16″
7/64″	21/64″
1/8″	11/32″
9/64″	23/64″
5/32″	3/8″
11/64″	25/64″
3/16″	13/32″
13/64″	27/64″
7/32″	7/16″
15/64″	29/64″
1/4″	15/32″
17/64″	31/64″
9/32″	1/2″
19/64″	

SPECIAL

33/64″	35/64″
17/32″	9/16″

RIVETING Round Head

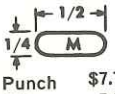
1/8″	7/32″
5/32″	1/4″
3/16″	

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

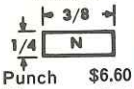
★ IF SMALLEST DIMENSION IS LESS THAN 1/8″, PRICE QUOTED ON APPLICATION

TYPE M



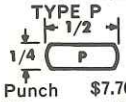
Punch	$7.70
Die	5.80
*Stripper	8.80

TYPE N



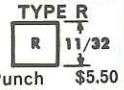
Punch	$6.60
Die	5.50
*Stripper	8.25

TYPE P



Punch	$7.70
Die	5.80
*Stripper	8.80

TYPE R

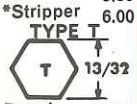


Punch	$5.50
Die	5.50
*Stripper	5.50

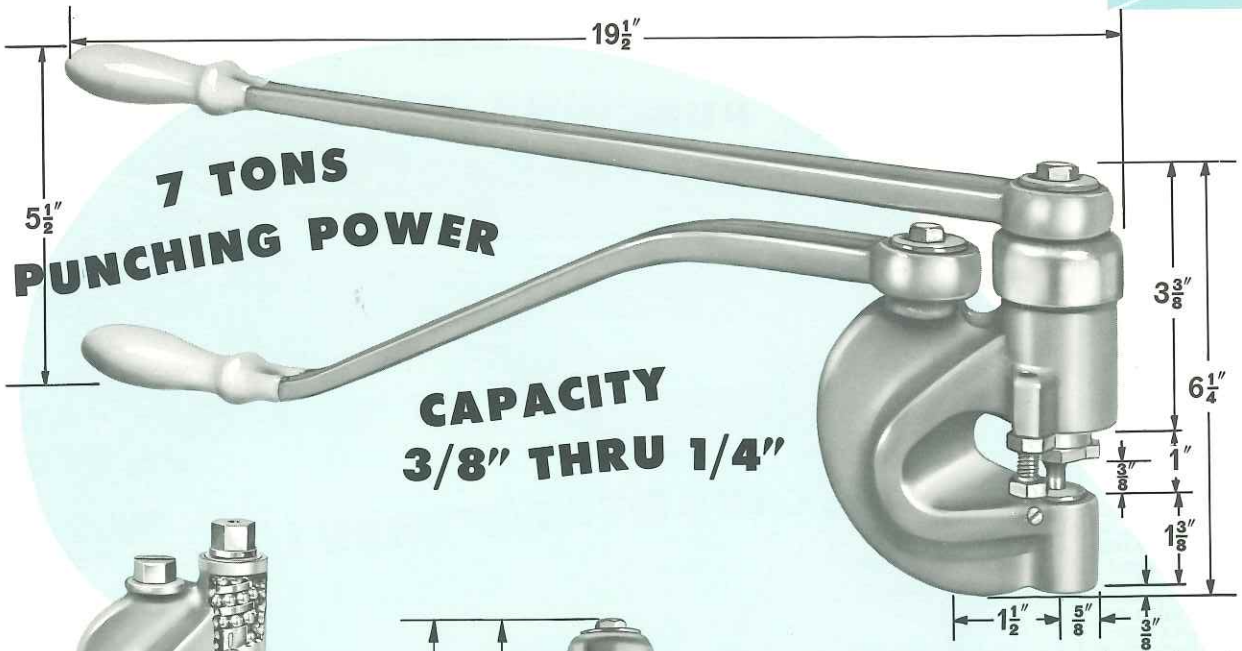
TYPE S

Punch	$7.70
Die	5.80
*Stripper	6.00

TYPE T

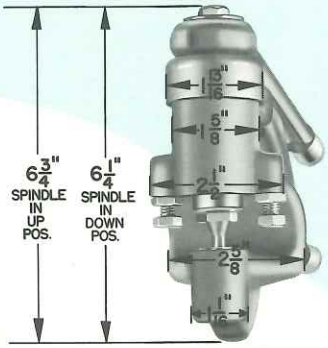


Punch	$7.70
Die	5.80
*Stripper	6.00

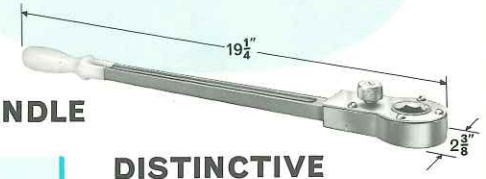


BALL BEARING SCREW PRINCIPLE

As shown in the cutaway view above, the spindle turns on 5/16″ ball bearings in a ball race, one half of the race being the spindle and one half being the punch frame.

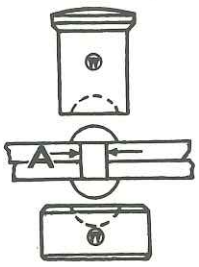


The No. 10 Ball Bearing Punch weighs only 9 pounds but will develop 14,700 pounds punching pressure. Minimum experience is required, to operate this tool properly. The screw principle reduces the effort required, and the ball bearings add smoothness to the operation and reduce friction to a minimum. A Ratchet Handle is available to aid punching in close quarters. One 9/32″ Round Punch and Die is furnished with the tool. As shown below, a Bench Mounting Base is available for fixed operation.



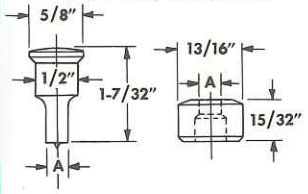
No. 113 RATCHET HANDLE

No. 10 RIVETING PUNCHES AND DIES



PRICE PER SET $4.40
A — 1/8″, 5/32″, 3/16″, 7/32″, 1/4″ DIAMETER OF RIVET

DIMENSIONS OF PUNCHES AND DIES FOR No. 10 PUNCH



A—MIN. 3/32″, MAX. 9/16″
No. 10 PUNCH & DIE

SPECIFICATIONS

Capacity	3/8″ thru 1/4″ mild steel
Depth of Throat	1½″
Space between Punch and Die	⅜″
Length Overall	19½″
Weight of Punch	9 lbs.
Length of No. 113 Ratchet Handle	19¼″
Weight of No. 113 Ratchet Handle	3½ lbs.

NET PRICES — F.O.B. FACTORY

No. 10 Ball Bearing Punch	$35.75
No. 113 Ratchet Handle	20.00
No. 10 Standard Round Punch, 3/32″ thru 1/2″	.85
No. 10 Standard Round Die, 3/32″ thru 1/2″	.85
No. 10 Special Round Punch, 33/64″ thru 9/16″	1.65
No. 10 Special Round Die, 33/64″ thru 9/16″	1.65
No. 10 Special Punch Coupler, for 33/64″, 17/32″	2.20
No. 10 Special Punch Coupler, for 35/64″, 9/16″	2.20
No. 10 Riveting Punch, 1/8″ thru 1/4″	2.20
No. 10 Riveting Die, 1/8″ thru 1/4″	2.20

BENCH MOUNTING BASE

Price No. 10 Bench Mounting Base	$7.70
Weight No. 10 Bench Mounting Base	4½ lbs.

DISTINCTIVE FEATURES OF No. 10 BALL BEARING PUNCH

This powerful ball bearing hand punch is compact in size, operates with great speed, and produces a more perfect hole than drilling. A large selection of punches and dies, moderately priced, are available at all times from stock. One complete revolution of the upper handle (360°) will raise or lower the punch 1/2″.

No. 10 BENCH MOUNTING BASE

Additional Round, Special Round, Riveting, and Irregular Shaped Punches and Dies — shown on the left hand side of this page — are available from stock.

* Guide Stripper required.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. 11 BALL BEARING PUNCH

STANDARD ROUND PUNCH AND DIE SIZES

3/32″	5/16″
7/64″	21/64″
1/8″	11/32″
9/64″	23/64″
5/32″	3/8″
11/64″	25/64″
3/16″	13/32″
13/64″	27/64″
7/32″	7/16″
15/64″	29/64″
1/4″	15/32″
17/64″	31/64″
9/32″	1/2″
19/64″	

SPECIAL

33/64″	35/64″
17/32″	9/16″

RIVETING Round Head

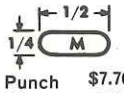
1/8″	7/32″
5/32″	1/4″
3/16″	

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

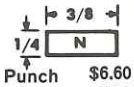
★ IF SMALLEST DIMENSION IS LESS THAN 1/8″ PRICE QUOTED ON APPLICATION

TYPE M



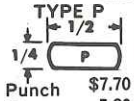
Punch	$7.70
Die	5.80
*Stripper	8.80

TYPE N



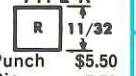
Punch	$6.60
Die	5.50
*Stripper	8.25

TYPE P



Punch	$7.70
Die	5.80
*Stripper	8.80

TYPE R

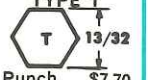


Punch	$5.50
Die	5.50
*Stripper	5.50

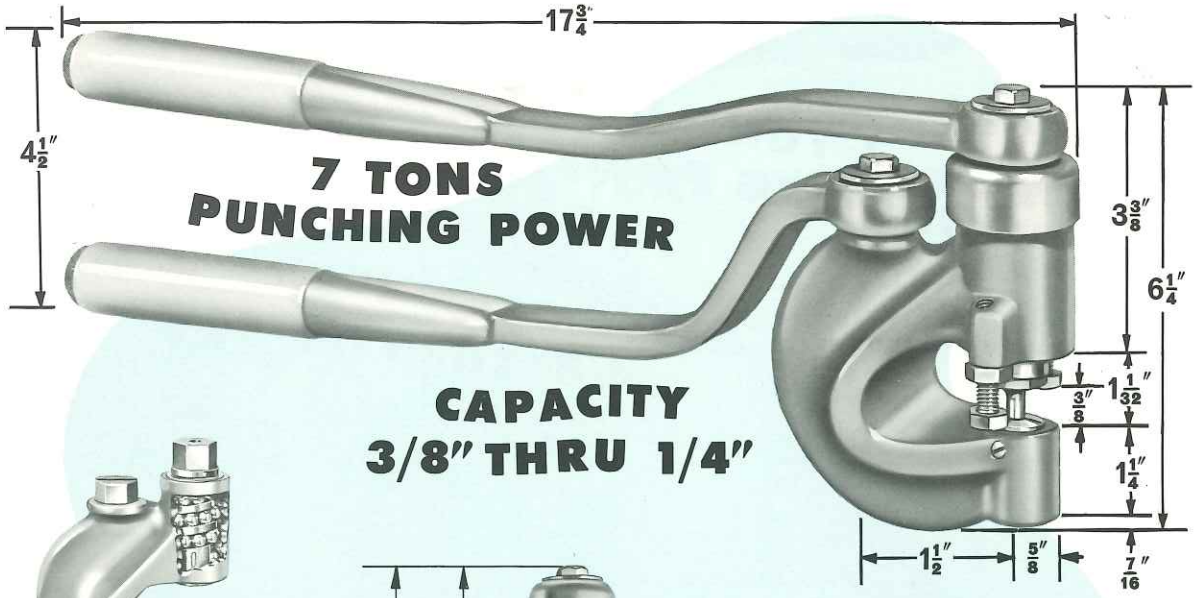
TYPE S

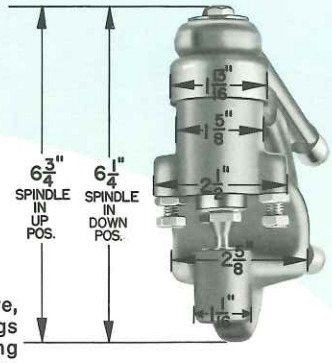
Punch	$7.70
Die	5.80
*Stripper	6.00

TYPE T



Punch	$7.70
Die	5.80
*Stripper	6.00

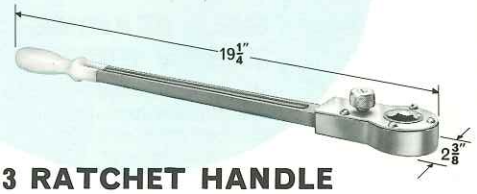




The No. 11 Ball Bearing Punch weighs only 9 pounds but will develop 14,700 pounds punching pressure. A Ratchet Handle is available to aid punching in close quarters. One 9/32″ Round Punch and Die is furnished with the tool. As shown below, a Bench Mounting Base is available for fixed operation.

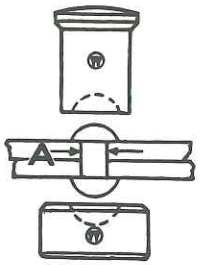
BALL BEARING SCREW PRINCIPLE

As shown in the cutaway view above, the spindle turns on 5/16″ ball bearings in a ball race, one half of the race being the spindle and one half being the punch frame.



No. 113 RATCHET HANDLE

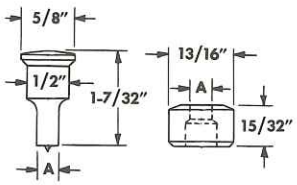
No. 11 RIVETING PUNCHES AND DIES



PRICE PER SET $4.40

A—1/8″, 5/32″, 3/16″, 7/32″, 1/4″ DIAMETER OF RIVET

DIMENSIONS OF PUNCHES AND DIES FOR No. 11 PUNCH



A—MIN. 3/32″, MAX. 9/16″

No. 10 PUNCH & DIE

SPECIFICATIONS

Capacity	3/8″ hole thru 1/4″ mild steel
Depth of Throat	1½″
Space between Punch and Die	3/8″
Length Overall	17¾″
Weight of Punch	9 lbs.
Length of No. 113 Ratchet Handle	19¼″
Weight of No. 113 Ratchet Handle	3½ lbs.

NET PRICES — F.O.B. FACTORY

No. 11 Ball Bearing Punch	$38.50
No. 113 Ratchet Handle	20.00
No. 10 Standard Round Punch, 3/32″ thru 1/2″	.85
No. 10 Standard Round Die, 3/32″ thru 1/2″	.85
No. 10 Special Round Punch, 33/64″ thru 9/16″	1.65
No. 10 Special Round Die, 33/64″ thru 9/16″	1.65
No. 10 Special Punch Coupler, for 33/64″, 17/32″	2.20
No. 10 Special Punch Coupler, for 35/64″, 9/16″	2.20
No. 11 Riveting Punch, 1/8″ thru 1/4″	2.20
No. 11 Riveting Die, 1/8″ thru 1/4″	2.20

BENCH MOUNTING BASE

Price No. 11 Bench Mounting Base	$7.70
Weight No. 11 Bench Mounting Base	4½ lbs.

DISTINCTIVE FEATURES OF No. 11 BALL BEARING PUNCH

Minimum experience is required, to operate this tool properly, and to produce more perfect holes than drilling. Handles on the No. 11 Punch are shorter than on the No. 10, and are hollow to hold extra Punches and Dies. The screw principle reduces the effort required, and the ball bearings add smoothness of operation and reduce friction to a minimum. One complete revolution of the upper handle (360°) will raise or lower the punch 1/2″.

No. 11 BENCH MOUNTING BASE

Additional Round, Special Round, Riveting, and Irregular Shaped Punches and Dies — shown on the left hand side of this page — are available from stock.

* Guide Stripper required.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. 12 BALL BEARING PUNCH

STANDARD ROUND PUNCH AND DIE SIZES

3/32"	5/16"
7/64"	21/64"
1/8"	11/32"
9/64"	23/64"
5/32"	3/8"
11/64"	25/64"
3/16"	13/32"
13/64"	27/64"
7/32"	7/16"
15/64"	29/64"
1/4"	15/32"
17/64"	31/64"
9/32"	1/2"
19/64"	

SPECIAL

33/64"	35/64"
17/32"	9/16"

RIVETING Round Head

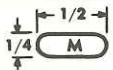
1/8"	7/32"
5/32"	1/4"
3/16"	

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

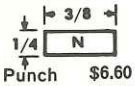
★ IF SMALLEST DIMENSION IS LESS THAN 1/8", PRICE QUOTED ON APPLICATION

TYPE M



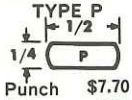
Punch	$7.70
Die	5.80
*Stripper	8.80

TYPE N



Punch	$6.60
Die	5.50
*Stripper	8.25

TYPE P



Punch	$7.70
Die	5.80
*Stripper	8.80

TYPE R

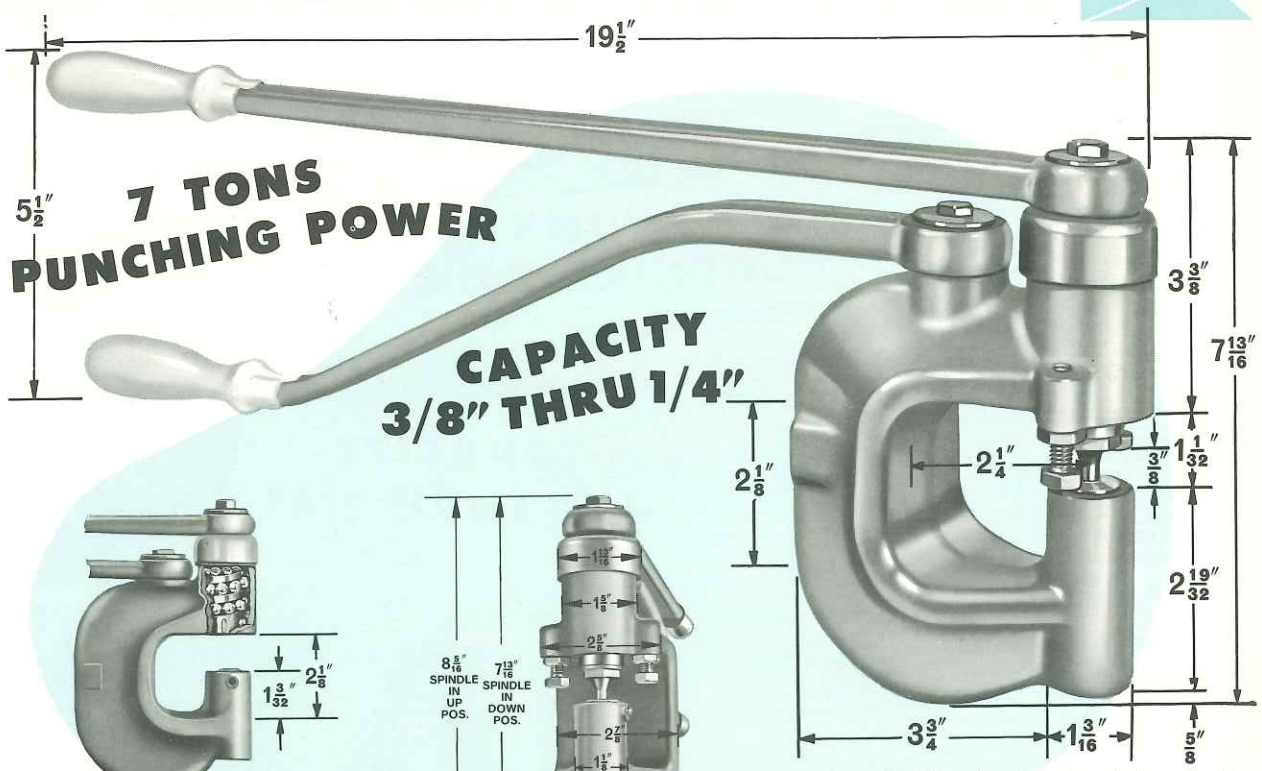
Punch	$5.50
Die	5.50
*Stripper	5.50

TYPE S

Punch	$7.70
Die	5.80
*Stripper	6.00

TYPE T

Punch	$7.70
Die	5.80
*Stripper	6.00



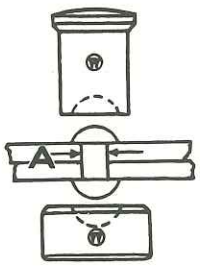
BALL BEARING SCREW PRINCIPLE

As shown in the cutaway view above, the spindle turns on 5/16" ball bearings in a ball race, one half of the race being the spindle and one half being the punch frame.

The No. 12 Ball Bearing Punch weighs only 13 pounds but will develop 14,700 pounds punching pressure. A Ratchet Handle is available to aid punching in close quarters. One 9/32" Round Punch and Die is furnished with the tool. As shown below, a Bench Mounting Base is available for fixed operation.

No. 113 RATCHET HANDLE

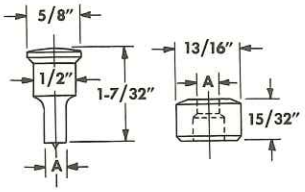
No. 12 RIVETING PUNCHES AND DIES



PRICE PER SET $4.40

A — 1/8", 5/32", 3/16", 7/32", 1/4" DIAMETER OF RIVET

DIMENSIONS OF PUNCHES AND DIES FOR No. 12 PUNCH



A—MIN. 3/32", MAX. 9/16"

No. 10 PUNCH & DIE

SPECIFICATIONS

Capacity	3/8" hole thru 1/4" mild steel
Depth of Throat	2¼"
Space between Punch and Die	3/8"
Length Overall	19½"
Weight of Punch	13 lbs.
Length of No. 113 Ratchet Handle	19¼"
Weight of No. 113 Ratchet Handle	3½ lbs.

NET PRICES — F.O.B. FACTORY

No. 12 Ball Bearing Punch	$41.25
No. 113 Ratchet Handle	20.00
No. 10 Standard Round Punch, 3/32" thru 1/2"	.85
No. 10 Standard Round Die, 3/32" thru 1/2"	.85
No. 10 Special Round Punch, 33/64" thru 9/16"	1.65
No. 10 Special Round Die, 33/64" thru 9/16"	1.65
No. 10 Special Punch Coupler, for 33/64", 17/32"	2.20
No. 10 Special Punch Coupler, for 35/64", 9/16"	2.20
No. 12 Riveting Punch, 1/8" thru 1/4"	2.20
No. 12 Riveting Die, 1/8" thru 1/4"	2.20

BENCH MOUNTING BASE

Price No. 12 Bench Mounting Base	$7.70
Weight No. 12 Bench Mounting Base	6¼ lbs.

DISTINCTIVE FEATURES OF No. 12 BALL BEARING PUNCH

Minimum experience is required, to operate this tool properly, and to produce more perfect holes than drilling. Note depth and height of throat, to permit punching the web of channels. The screw principle reduces the effort required, and the ball bearings add smoothness of operation and reduce friction to a minimum. One complete revolution of the upper handle (360°) will raise or lower the punch 1/2".

No. 12 BENCH MOUNTING BASE

Additional Round, Special Round, Riveting, and Irregular Shaped Punches and Dies — shown on the left hand side of this page — are available from stock.

* Guide Stripper required.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. CTL 20 BALL BEARING PUNCH

PUNCHES CLOSE TO LEG OF ANGLE IRON

STANDARD ROUND PUNCH AND DIE SIZES

1/8″	11/32″
9/64″	23/64″
5/32″	3/8″
11/64″	25/64″
3/16″	13/32″
13/64″	27/64″
7/32″	7/16″
15/64″	29/64″
1/4″	15/32″
17/64″	31/64″
9/32″	1/2″
19/64″	33/64″†
5/16″	17/32″†
21/64″	35/64″†
	9/16″†

SPECIAL DIES

33/64″	35/64″
17/32″	9/16″

RIVETING
Round Head

1/8″	7/32″
5/32″	1/4″
3/16″	

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

★ IF SMALLEST DIMENSION IS LESS THAN 1/8″, PRICE QUOTED ON APPLICATION

TYPE M — 1/2 × 1/4 — M

Punch	$11.50
Die	5.80
*Stripper	12.25

TYPE N — 3/8 × 1/4 — N

Punch	$ 9.35
Die	5.50
*Stripper	13.50

TYPE P — 1/2 × 1/4 — P

Punch	$11.50
Die	5.80
*Stripper	13.50

TYPE R — R — 11/32

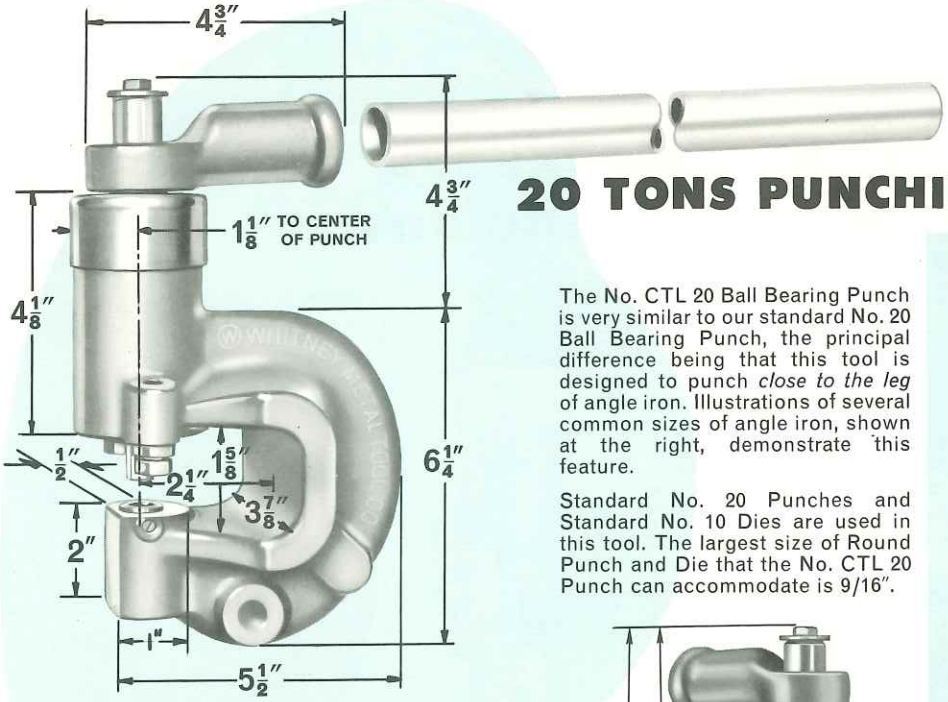
Punch	$ 9.35
Die	5.50
*Stripper	12.25

TYPE S — S — 13/32

Punch	$11.50
Die	5.80
*Stripper	13.50

TYPE T — T — 13/32

Punch	$11.50
Die	5.80
*Stripper	13.50



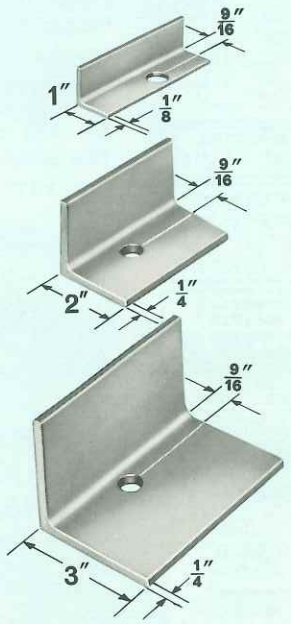
WEIGHS ONLY 18 LBS.

20 TONS PUNCHING POWER

The No. CTL 20 Ball Bearing Punch is very similar to our standard No. 20 Ball Bearing Punch, the principal difference being that this tool is designed to punch *close to the leg* of angle iron. Illustrations of several common sizes of angle iron, shown at the right, demonstrate this feature.

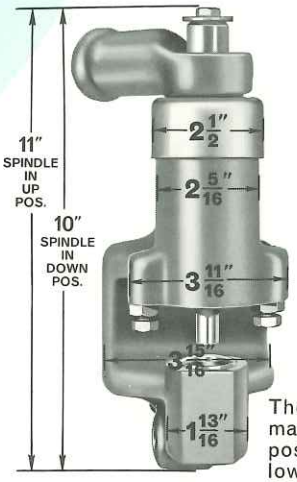
Standard No. 20 Punches and Standard No. 10 Dies are used in this tool. The largest size of Round Punch and Die that the No. CTL 20 Punch can accommodate is 9/16″.

DIMENSIONS FROM LEG OF ANGLE IRON TO CENTER OF HOLE

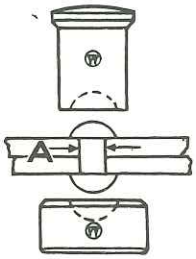


No. 119 RATCHET HANDLE

The No. 119 Ratchet Handle is convenient when working in limited areas. A piece of 3/4″ pipe may be used as a lever.

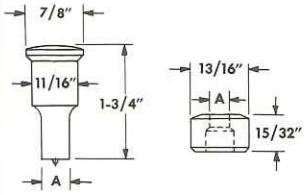


No. CTL 20 RIVETING PUNCHES AND DIES



PRICE PER SET $4.95
A — 1/8″, 5/32″, 3/16″, 7/32″, 1/4″ DIAMETER OF RIVET

DIMENSIONS OF PUNCHES AND DIES FOR No. CTL 20 PUNCH



A — MIN. 1/8″, MAX. 9/16″
No. 20 PUNCH & No. 10 DIE

The No. CTL 20 Ball Bearing Punch may be used portably or in a fixed position (see Bench Mounting Base, lower right). The tool weighs only 18 lbs. yet can develop 39,300 lbs. of punching pressure.

One 1/2″ Round Punch and Die is furnished with the No. CTL 20 Ball Bearing Punch.

A 48″ Pipe Handle, for use as a lever, is available. One complete revolution of the operating handle (360°) will lower or raise the punch 1/2″.

Additional Round, Special Round, Riveting, and Irregular Shaped Punches and Dies — shown on the left-hand side of this page — are available from stock.

SPECIFICATIONS

Capacity	1/2″ hole thru 1/2″ mild steel
Depth of Throat	2 1/4″
Space between Punch and Die	3/4″
Length of No. 119 Ratchet Handle	7″
Weight of No. CTL 20 Punch	18 lbs.
Weight of No. 119 Ratchet Handle	4 1/2 lbs.
Weight of 48″ Pipe Handle	4 lbs.

NET PRICES — F.O.B. FACTORY

No. CTL 20 Ball Bearing Punch	$71.50
No. 119 Ratchet Handle	24.00
48″ Pipe Handle	4.40
No. 20 Standard Round Punch, 1/8″ thru 9/16	1.40
No. 10 Standard Round Die, 1/8″ thru 1/2″	.85
No. 10 Special Round Die, 33/64″ thru 9/16″	1.65
No. 20 Riveting Punch, 1/8″ thru 1/4″	2.75
No. 10 Riveting Die, 1/8″ thru 1/4″	2.20

BENCH MOUNTING BASE

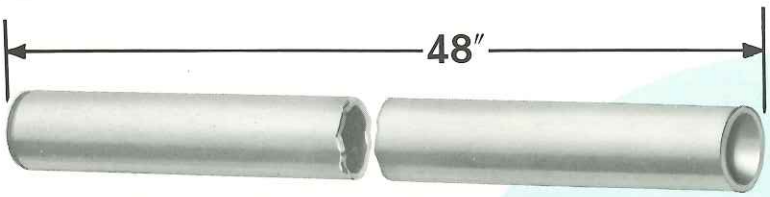
Price No. CTL 20 Bench Mounting Base	$ 7.70
Weight No. CTL 20 Bench Mounting Base	4 1/2 lbs.

No. CTL 20 BENCH MOUNTING BASE

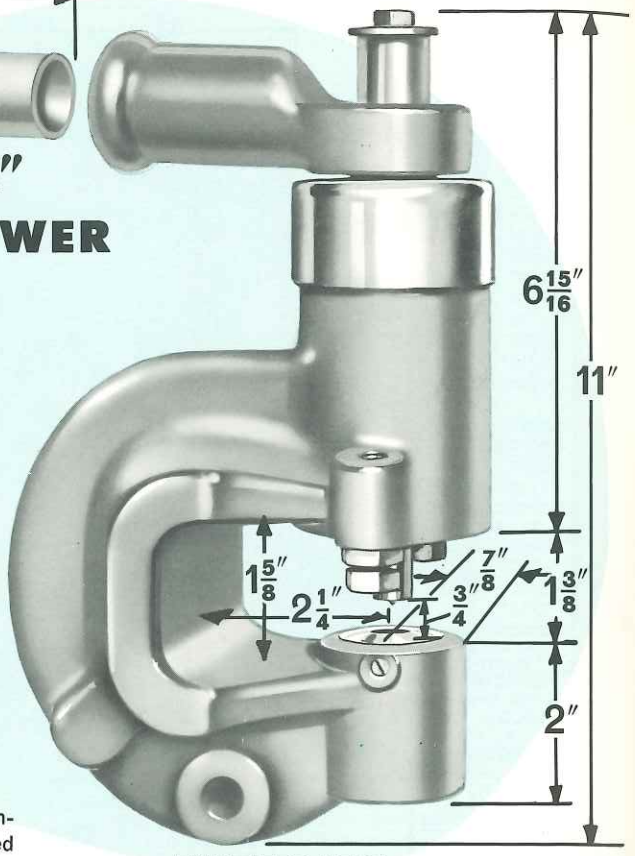
* Guide Stripper required. †Requires Special Dies.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

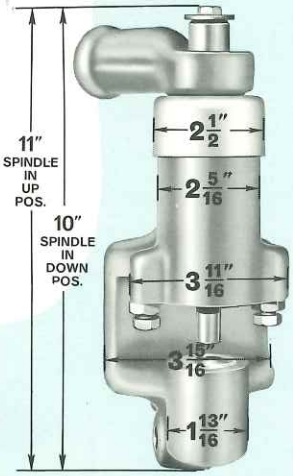
No. 20 BALL BEARING PUNCH



CAPACITY 1/2″ THRU 1/2″
20 TONS PUNCHING POWER



The No. 20 Ball Bearing Punch operates on a ball bearing screw principle. The spindle turns on 11/32″ ball bearings in a ball race, one half being the spindle and one half being the frame. This principle reduces effort required to a minimum.



No. 119 RACHET HANDLE

The No. 119 Ratchet Handle is convenient when working in a limited area. A piece of standard ¾″ pipe of desired length may be inserted in the socket of the No. 119 Ratchet Handle and used as a lever.

WEIGHS ONLY 18 LBS.

The No. 20 Ball Bearing Punch may be used portably or in a fixed position. It weighs only 18 pounds, yet it can develop approximately 20 tons of punching power. One ½″ Round Punch and Die is furnished with the No. 20 Ball Bearing Punch. A 48″ Pipe Handle may be purchased for use as a lever. Also, a Bench Mounting Base is available for use in a fixed position. One complete revolution (360°) of the handle will raise or lower the punch ½″.

Additional Round, Special Round, Riveting, and Irregular Shaped Punches and Dies — shown on the left hand side of this page — are available from stock.

STANDARD ROUND PUNCH AND DIE SIZES

1/8″	27/64″
9/64″	7/16″
5/32″	29/64″
11/64″	15/32″
3/16″	31/64″
13/64″	1/2″
7/32″	33/64″
15/64″	17/32″
1/4″	35/64″
17/64″	9/16″
9/32″	37/64″
19/64″	19/32″
5/16″	39/64″
21/64″	5/8″
11/32″	41/64″
23/64″	21/32″
3/8″	43/64″
25/64″	11/16″
13/32″	

SPECIAL
3/4″ 13/16″

RIVETING
1/8″ 5/32″ 3/16″ 7/32″ 1/4″ 9/32″ 5/16″ 11/32″ 3/8″

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

★ IF SMALLEST DIMENSION IS LESS THAN 1/8″, PRICE QUOTED ON APPLICATION

TYPE M — 11/16″ × 1/2″ (M)

Punch	$11.50
Die	11.50
*Stripper	12.25

TYPE N — 9/16″ × 3/8″ (N)

Punch	$ 9.35
Die	9.35
*Stripper	13.50

TYPE P — 11/16″ × 1/2″ (P)

Punch	$11.50
Die	11.50
*Stripper	13.50

TYPE R — (R) 15/32″

Punch	$ 9.35
Die	9.35
*Stripper	12.25

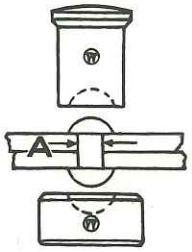
TYPE S — (S) 19/32″

Punch	$11.50
Die	11.50
*Stripper	13.50

TYPE T — (T) 19/32″

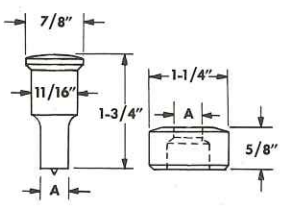
Punch	$11.50
Die	11.50
*Stripper	13.50

No. 20 RIVETING PUNCHES AND DIES



PRICE PER SET $5.50
1/8″, 5/32″, 3/16″, 7/32″, 1/4″, 9/32″, 5/16″, 11/32″, 3/8″
DIAMETER OF RIVET

DIMENSIONS OF PUNCHES AND DIES FOR No. 20 PUNCH



A — MIN. 1/8″, MAX. 13/16″
No. 20 PUNCH & DIE

* Guide Stripper required.

SPECIFICATIONS

Capacity	½″ hole thru ½″ mild steel
Depth of Throat	2¼″
Space between Punch and Die	¾″
Length of No. 119 Ratchet Handle	7″
Weight of Punch	18 lbs.
Weight of No. 119 Ratchet Handle	4½ lbs.
Weight of 48″ Pipe Handle	4 lbs.

NET PRICES — F.O.B. FACTORY

No. 20 Ball Bearing Punch	$66.00
No. 119 Ratchet Handle	24.00
48″ Pipe Handle	4.40
No. 20 Standard Round Punch, 1/8″ thru 11/16″	1.40
No. 20 Standard Round Die, 1/8″ thru 11/16″	1.40
No. 20 Special Round Punch, ¾″ or 13/16″	2.20
No. 20 Special Round Die, ¾″ or 13/16″	2.20
No. 20 Special Punch Coupler, for ¾″	2.75
No. 20 Special Split Punch Coupler, for 13/16″	2.75
No. 20 Riveting Punch, 1/8″ thru 3/8″	2.75
No. 20 Riveting Die, 1/8″ thru 3/8″	2.75

BENCH MOUNTING BASE

Price No. 20 Bench Mounting Base	$7.70
Weight No. 20 Bench Mounting Base	4½ lbs.

No. 20 BENCH MOUNTING BASE

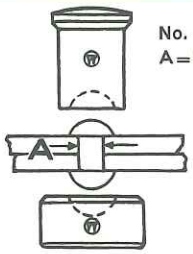
No. HP 20 HYDRAULIC PUNCH

IRREGULAR SHAPED PUNCHES AND DIES

Shown below are sizes stocked. For any size not shown, add 20% to prices shown.
If smallest dimension is less than 1/8", price quoted on application.

TYPE R			TYPE M		
R 15/32	Punch	$ 9.35	11/16 × 1/2 M	Punch	$11.50
	Die	9.35		Die	11.50
TYPE S			TYPE N		
S 19/32	Punch	$11.50	9/16 × 3/8 N	Punch	$ 9.35
	Die	11.50		Die	9.35
TYPE T			TYPE P		
T 19/32	Punch	$11.50	11/16 × 1/2 P	Punch	$11.50
	Die	11.50		Die	11.50

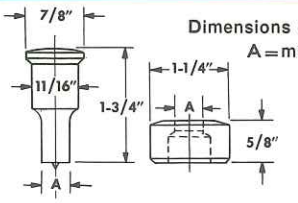
Uses standard stripper supplied with punch.



No. 20 RIVETING PUNCHES AND DIES
A=DIAMETER OF RIVET

1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8"

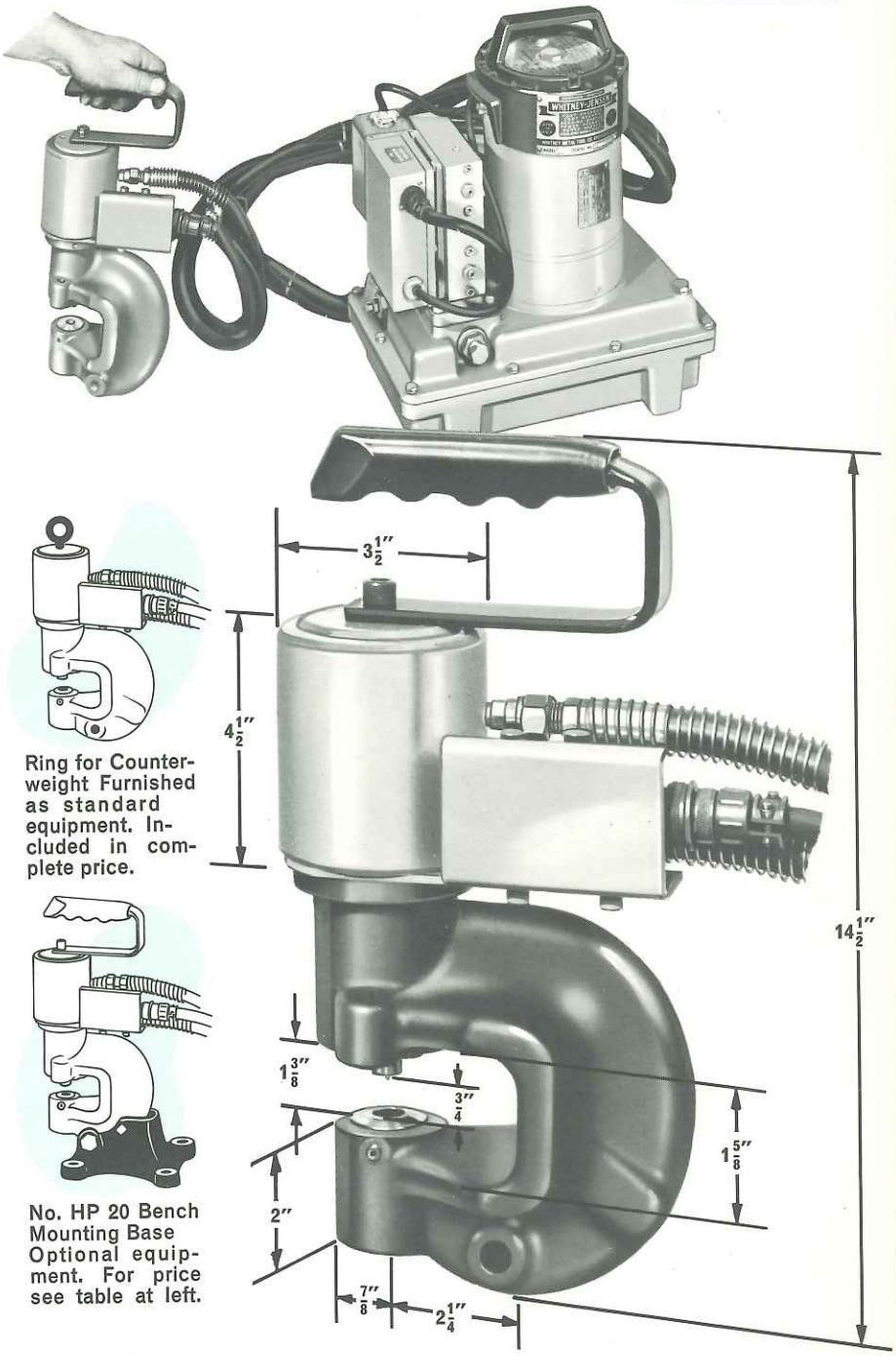
Price per set—Punch and Die—$5.50



Dimensions of No. 20 Punch and Die
A=min. 1/8", max. 13/16"

SPECIFICATIONS

Capacity—1/2" dia. thru 1/2" M.S.	
Throat depth—2-1/4"	
Space between Punch and Die—3/4"	
Weight—Punch only—28 lbs.	
Weight—Punch with Power Unit—175 lbs.	
Net Prices—F.O.B. Factory	
No. HP 20, complete with 1/2" rd.P.&D. with 8' hydraulic hose and controls	$690.00
with 12' hydraulic hose and controls	700.00
with 16' hydraulic hose and controls	725.00
with 20' hydraulic hose and controls	750.00
No. 20 Std. 1/8" thru 11/16" rd. P. or D. ea.	1.40
No. 20 Spec 3/4"—13/16" rd.P. or D. ea.	2.20
*No. 20 Spec. Split coupler for 3/4" or 13/16" P.	2.75
No. 20 1/8" thru 3/8" riveting P. or D.	2.75
8' hose and control cable with fittings	45.00
12' hose and control cable with fittings	58.00
16' hose and control cable with fittings	83.00
20' hose and control cable with fittings	108.00
BENCH MOUNTING BASE	
No. 20 Bench Mounting Base	$7.70
Weight No. 20 Bench Mounting Base	4-1/2 lbs.



Ring for Counterweight Furnished as standard equipment. Included in complete price.

No. HP 20 Bench Mounting Base Optional equipment. For price see table at left.

HP 20—READY-TO-RUN with 1/2" dia. P. & D $690.00

The big advantage of the Whitney-Jensen Model HP 20 Hydraulic Punch is its portability. It weighs only 28 pounds. However, if desired, it may be used in a fixed position with the Bench Mounting Base illustrated. The double stage Power-Packer electric hydraulic pump unit uses a wobble-plate type pump for optimum load distribution. No complex mechanisms.
Normal cycle time—9 seconds. Service is readily available from Blackhawk Power-Packer representatives located in all principle cities.

Accommodates all standard punches and dies from 1/8" thru 11/16" by 64ths
*Note: Special punches 3/4 and 13/16" require split coupler.

No. 40 BALL BEARING PUNCH

STANDARD ROUND PUNCH AND DIE SIZES

1/8″	19/32″
5/32″	5/8″
3/16″	21/32″
7/32″	11/16″
1/4″	23/32″
9/32″	3/4″
5/16″	25/32″
11/32″	13/16″
3/8″	27/32″
13/32″	7/8″
7/16″	29/32″
15/32″	15/16″
1/2″	31/32″
17/32″	1″
9/16″	

RIVETING Round Head

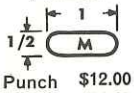
1/4″	13/32″
9/32″	7/16″
5/16″	15/32″
11/32″	1/2″
3/8″	

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

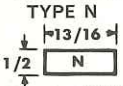
★ IF SMALLEST DIMENSION IS LESS THAN 1/8″, PRICE QUOTED ON APPLICATION

TYPE M



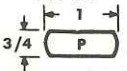
Punch	$12.00
Die	14.85
*Stripper	16.80

TYPE N



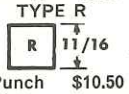
Punch	$10.50
Die	13.20
*Stripper	14.30

TYPE P



Punch	$12.00
Die	14.85
*Stripper	16.80

TYPE R

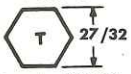


Punch	$10.50
Die	13.20
*Stripper	10.00

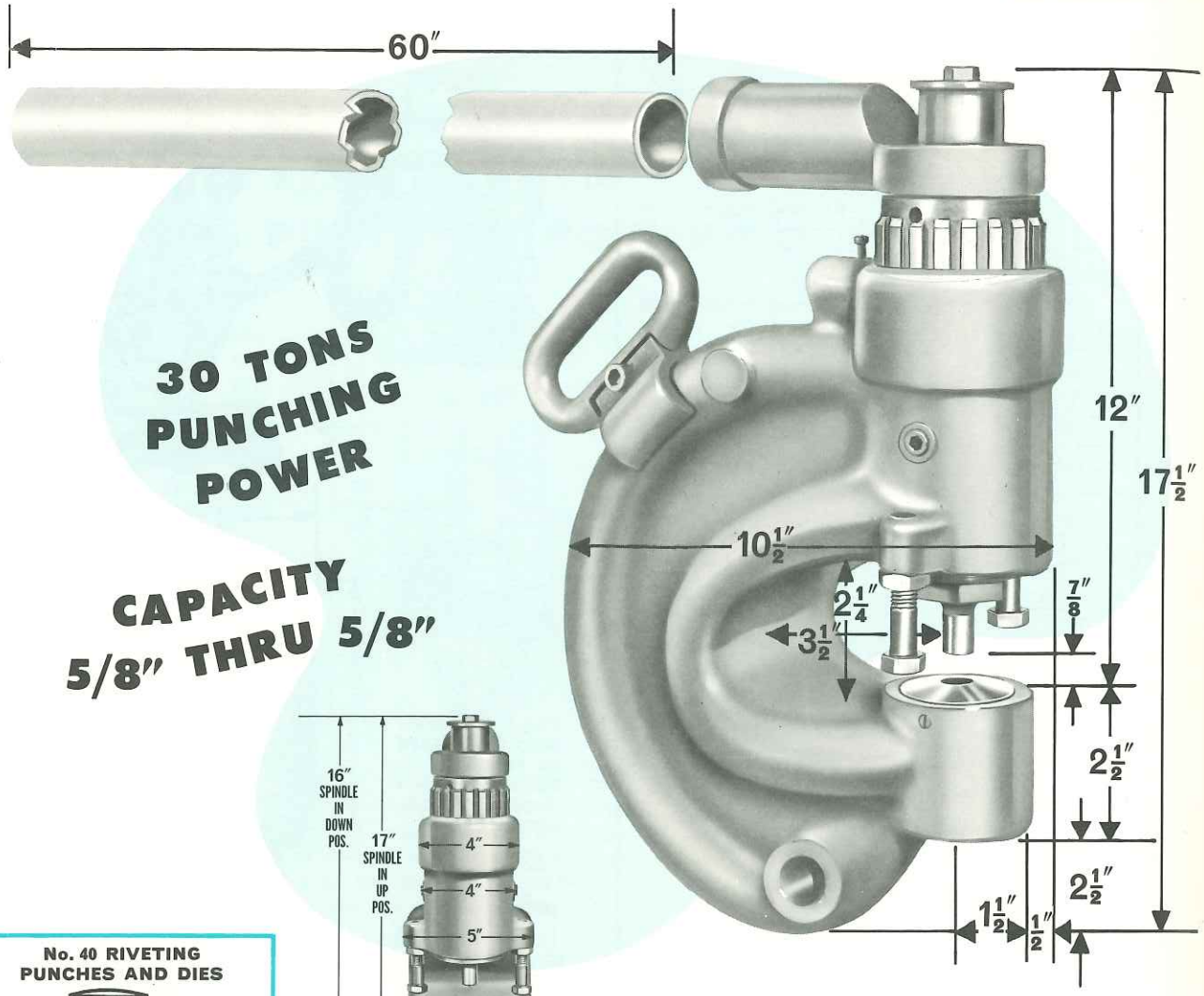
TYPE S

Punch	$12.00
Die	14.85
*Stripper	11.50

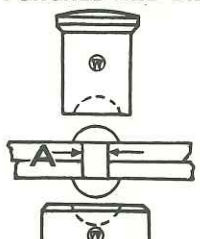
TYPE T



Punch	$12.00
Die	14.85
*Stripper	11.50



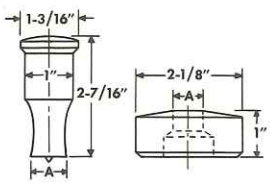
No. 40 RIVETING PUNCHES AND DIES



PRICE PER SET $13.70

A—1/4″, 9/32″, 5/16″, 11/32″, 3/8″, 13/32″, 7/16″, 15/32″, 1/2″ DIAMETER OF RIVET

DIMENSIONS OF PUNCHES AND DIES FOR No. 40 PUNCH



A—MIN. 1/8″, MAX. 1″

No. 40 PUNCH & DIE

SPECIFICATIONS

Capacity	⅝″ hole thru ⅝″ mild steel
Depth of Throat	3½″
Space between Punch and Die	⅞″
Weight of Punch	66 lbs.
Weight of 60″ Pipe Handle	9½ lbs.

NET PRICES — F.O.B. FACTORY

No. 40 Ball Bearing Punch	$192.50
60″ Pipe Handle	5.50
No. 40 Standard Round Punch	3.30
No. 40 Standard Round Die	4.40
No. 40 Riveting Punch, ¼″ thru ½″	6.85
No. 40 Riveting Die, ¼″ thru ½″	6.85

BENCH MOUNTING BASE

Price No. 40 Bench Mounting Base	$16.50
Weight No. 40 Bench Mounting Base	16 lbs.

The No. 40 Ball Bearing Punch is the same type as our Nos. 10, 12, 20, 24, and 25, but is heavier in construction and has greater capacity. This Punch has a built-in detent, and is generally intended for use with the Bench Mounting Base; but it may be used as a portable tool if desired. One Standard Round Punch and Die of your choice, from the list shown at the left, is furnished with each tool. A piece of standard 1″ pipe, of desired length, may be inserted in operating handle and used as a lever. We can furnish a stock 60″ Pipe Handle.

No. 40 BENCH MOUNTING BASE

Additional Round, Riveting, and Irregular Shaped Punches and Dies — shown on the left-hand side of this page — are available from stock.

*Guide Stripper required.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

STANDARD ROUND PUNCH AND DIE SIZES

1/16″	9/32″
5/64″	19/64″
3/32″	5/16″
7/64″	21/64″
1/8″	11/32″
9/64″	23/64″
5/32″	3/8″
11/64″	25/64″
3/16″	13/32″
13/64″	27/64″
7/32″	7/16″
15/64″	29/64″
1/4″	15/32″
17/64″	31/64″
	1/2″

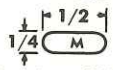
DIE SIZES No. 52 THRU Z

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

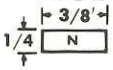
★ IF SMALLEST DIMENSION IS LESS THAN 1/8″, PRICE QUOTED ON APPLICATION

TYPE M



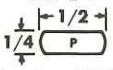
Punch $7.70
Die 5.80

TYPE N



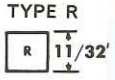
Punch $6.60
Die 5.50

TYPE P



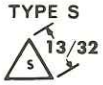
Punch $7.70
Die 5.80

TYPE R



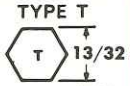
Punch $5.50
Die 5.50

TYPE S



Punch $7.70
Die 5.80

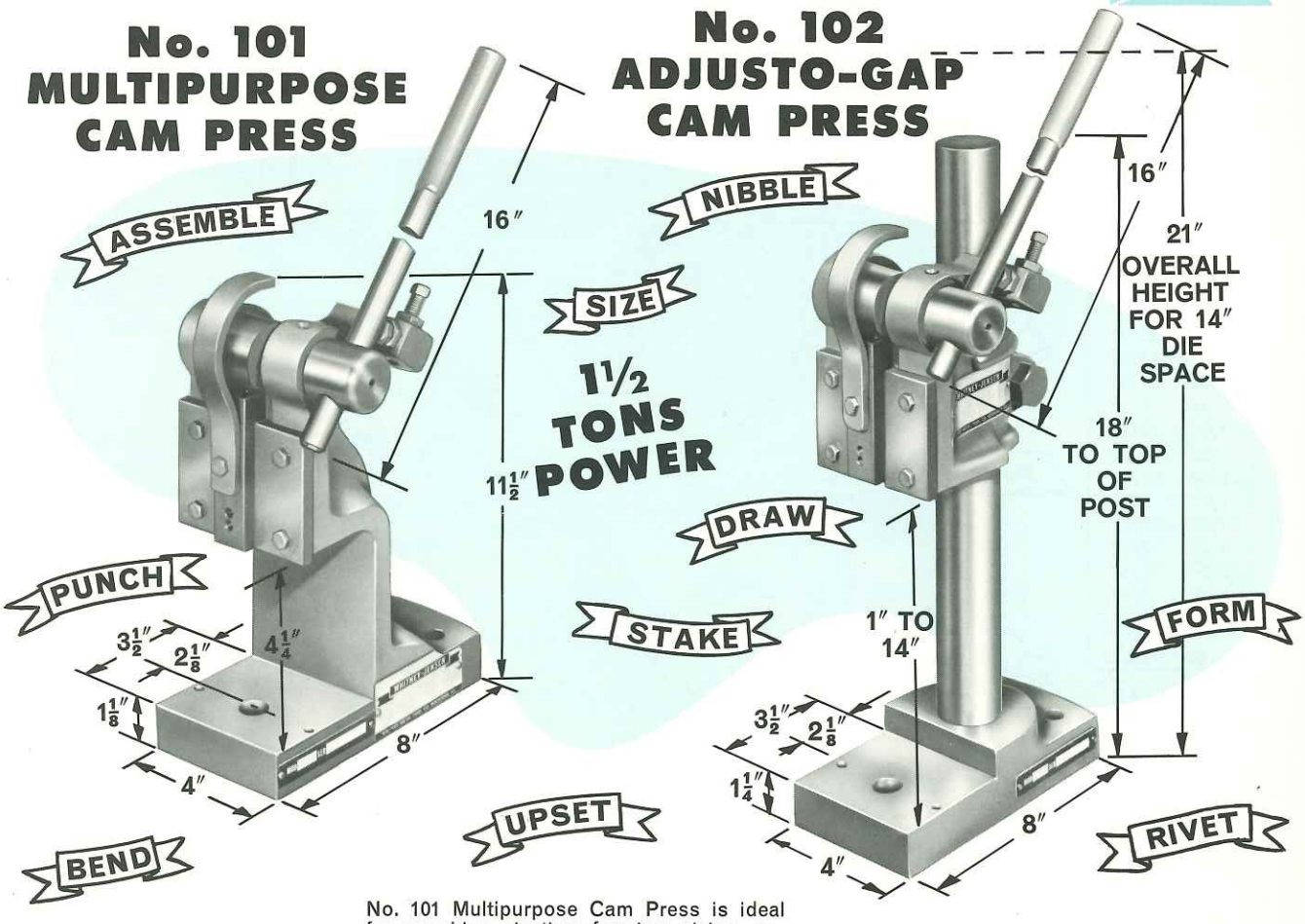
TYPE T



Punch $7.70
Die 5.80

No. 101 MULTIPURPOSE CAM PRESS

No. 102 ADJUSTO-GAP CAM PRESS

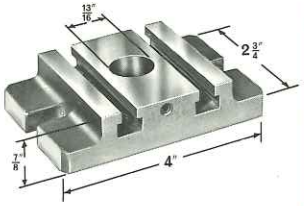


No. 101 Multipurpose Cam Press is ideal for punching, riveting, forming, sizing, upsetting, bending, drawing, staking, nibbling, assembling, and similar operations within its capacities of size and power. Convenient Punch Holder and Die Shoe are offered, to accommodate a wide range of sizes and types of Punches and Dies. A positive handle stop provides stroke-length control.

No. 102 Adjusto-Gap Cam Press combines all the features of No. 101 Multipurpose Cam Press with added versatility of rapid die space adjustment. The cam operating mechanism, instead of being fixed, is adjustably mounted on a vertical column for easy change of die space between 1″ and 14″. This head is not keyed to the column and hence can be pivoted to any position.

No. 205 PUNCH HOLDER

No. 204 GAUGE STRIPPER



No. 203 DIE SHOE

SPECIFICATIONS

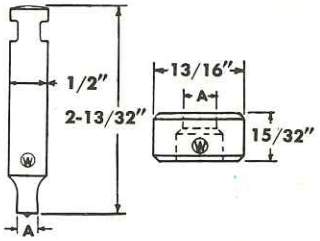
	No. 101	No. 102
Capacity	3000 lbs.	3000 lbs.
Length of Stroke	¾″	¾″
Die Space — Stroke up	4¼″	1″ to 14″
Diameter of Hole in Ram	⅜″	⅜″
Weight of Cam Press	30 lbs.	45 lbs.
Weight No. 203 Die Shoe	1½ lbs.	1½ lbs.
Weight No. 204 Stripper Gauge	5 oz.	5 oz.
Weight No. 205 Punch Holder	5 oz.	5 oz.

NET PRICES — F.O.B. FACTORY

No. 101 Cam Press	$ 85.00
No. 102 Cam Press	110.00
No. 203 Die Shoe	8.25
No. 204 Gauge Stripper	5.50
No. 205 Punch Holder	7.70
No. 8 Standard Round Punch	1.10
No. 10 Standard Round Flat Top Die	.85
No. 8 Drill Size Punch — No. 52 thru Z	1.40
No. 10 Drill Size Die — No. 52 thru Z	1.10

Additional Round, Drill Size, Irregular Shaped and Special Application Punches and Dies — shown on the left hand side of this page — are available from stock.

DIMENSIONS OF PUNCHES AND DIES FOR 101 AND 102 CAM PRESS



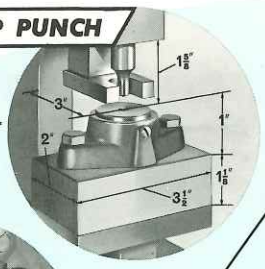
A—MIN. 1/16″, MAX. 1/2″

No. 8 PUNCH & No. 10 DIE

No. 6 UNIVERSAL FABRICATOR

No. 6 P PUNCH

CAPACITY — 9/16" ROUND HOLE THRU 12 GA. MILD STEEL.
USES No. 17 PUNCH, No. 20 DIE — SEE LIST AT LEFT

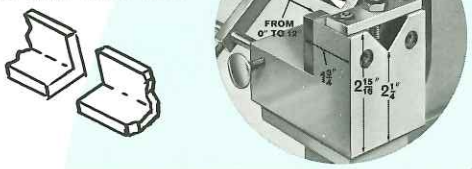


No. 6 S SCROLL SHEAR

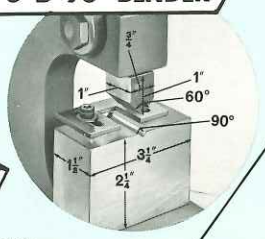
CAPACITY — 16 GA. MILD STEEL

No. 6 A ANGLE SHEAR

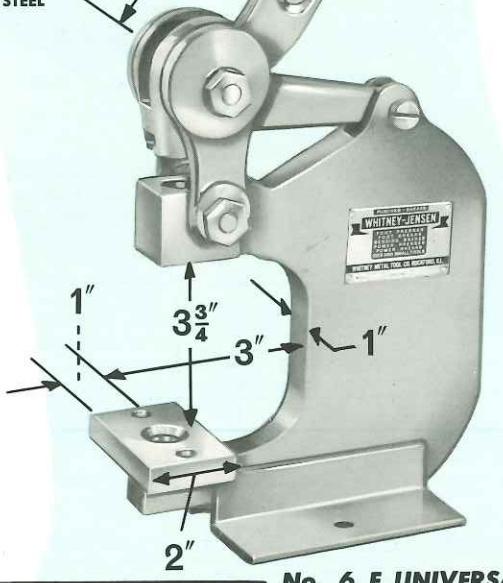
CAPACITY — 1" x 1" x 1/16" MILD STEEL ANGLE IRON



No. 6 B 90° BENDER

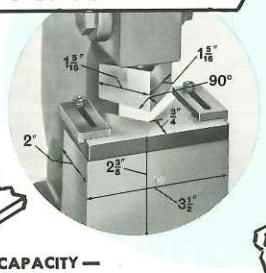


CAPACITY — 1" x 1" x 1/16" ANGLES, 1" x 1/16" FLATS, MILD STEEL



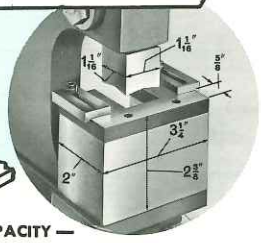
No. 6 F UNIVERSAL FABRICATOR

No. 6 N 90° NOTCHER



CAPACITY — 16 GA. MILD STEEL, 1" x 1" x 1/16" ANGLES

No. 6 C COPER



CAPACITY — 16 GA. MILD STEEL, 1" x 1" x 1/16" ANGLES

6 TOOLS IN ONE

The No. 6 Universal Fabricator is a versatile, efficient, and space-saving tool that is useful for numerous metal fabricating operations.

The No. 6 F Universal Fabricator may be purchased with any one of the six illustrated tools and any of the other tools may be purchased later as needed. Tools may be changed quickly and with ease.

STANDARD ROUND PUNCH AND DIE SIZES

1/16"	21/64"
3/32"	11/32"
7/64"	23/64"
1/8"	3/8"
9/64"	25/64"
5/32"	13/32"
11/64"	27/64"
3/16"	7/16"
13/64"	29/64"
7/32"	15/32"
15/64"	31/64"
1/4"	1/2"
17/64"	33/64"
9/32"	17/32"
19/64"	35/64"
5/16"	9/16"

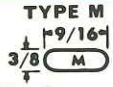
DRILL SIZES
No. 52 THRU Z

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

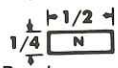
★ IF SMALLEST DIMENSION IS LESS THAN 1/8", PRICE QUOTED ON APPLICATION

TYPE M



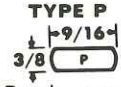
Punch $ 7.70
Die 11.50

TYPE N



Punch $ 6.60
Die 9.35

TYPE P

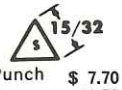


Punch $ 7.70
Die 11.50

TYPE R

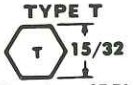
Punch $ 5.50
Die 9.35

TYPE S



Punch $ 7.70
Die 11.50

TYPE T



Punch $7.70
Die 11.50

SPECIFICATIONS

Capacities	As Shown for Each Unit
Weight No. 6 F Universal Fabricator	23 lbs.
Weight No. 6 P Punch Unit	3 lbs.
Weight No. 6 S Scroll Shear Unit	3 lbs.
Weight No. 6 A Angle Shear Unit	7 lbs.
Weight No. 6 B Bender Unit	4 lbs.
Weight No. 6 N Notcher Unit	5 lbs.
Weight No. 6 C Coper Unit	5 lbs.

NET PRICES — F.O.B. FACTORY

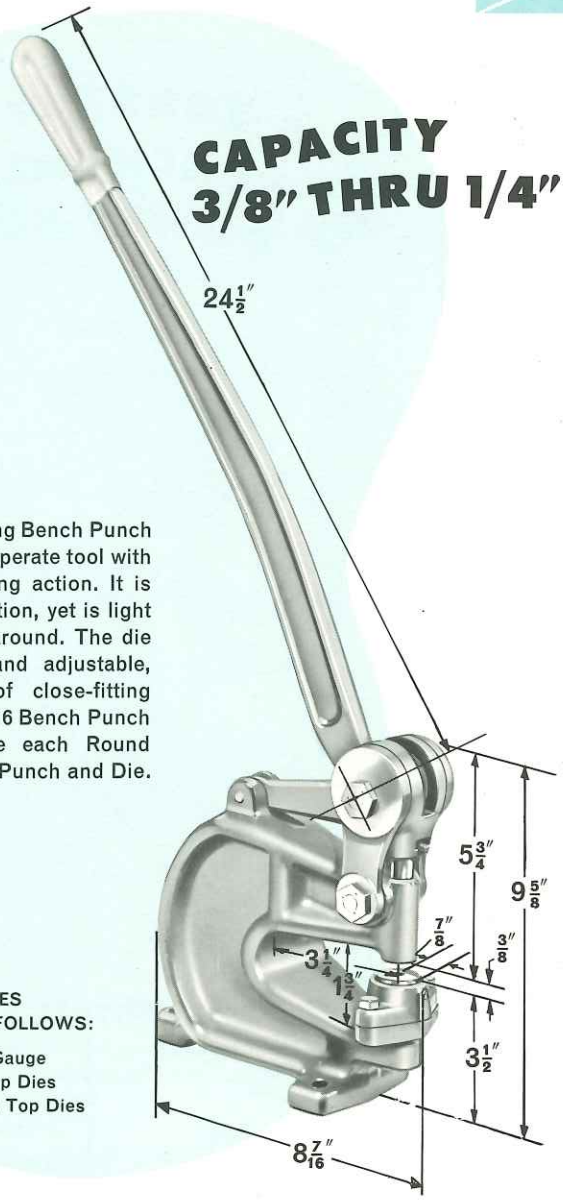
No. 6 F Universal Fabricator	$55.00
No. 6 P Punch Unit Complete	22.00
No. 17 Standard Size Round Punch	1.40
No. 20 Standard Size Round Flat Top Die	1.40
No. 17 Drill Size Punch — No. 52 thru Z	1.65
No. 20 Drill Size Flat Top Die — No. 52 thru Z	1.65
No. 6 S Scroll Shear Unit Complete	33.00
No. 6 S Scroll Shear Blade	9.90
No. 6 S Scroll Shear Die	9.90
No. 6 A Angle Shear Unit Complete	82.50
No. 6 A Angle Shear Blade	16.50
No. 6 A Angle Shear Die	22.00
No. 6 B Bender Unit Complete	38.50
No. 6 B Bender Upper Die	16.50
No. 6 B Bender Lower Die	22.00
No. 6 N Notcher Unit Complete	82.50
No. 6 N Notcher Blade	16.50
No. 6 N Notcher Die	22.00
No. 6 C Coper Unit Complete	82.50
No. 6 C Coper Blade	16.50
No. 6 C Coper Die	22.00

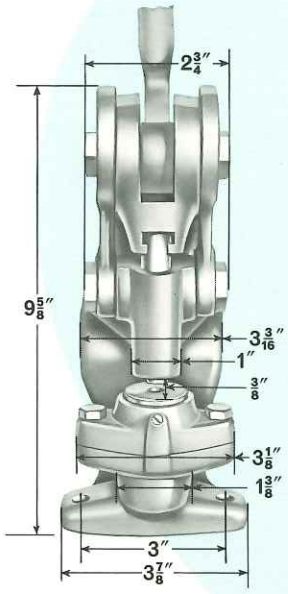
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. 16 ROLLER BEARING PUNCH

7 TONS PUNCHING POWER

CAPACITY 3/8" THRU 1/4"





The No. 16 Roller Bearing Bench Punch is a powerful, easy-to-operate tool with a smooth Roller Bearing action. It is designed for fixed location, yet is light enough to be carried around. The die shoe is removeable and adjustable, permitting the use of close-fitting punches and dies. No. 16 Bench Punch is furnished with one each Round 7/32", 9/32", and 11/32" Punch and Die.

STANDARD ROUND PUNCH AND DIE SIZES

1/16"	21/64"
3/32"	11/32"
7/64"	23/64"
1/8"	3/8"
9/64"	25/64"
5/32"	13/32"
11/64"	27/64"
3/16"	7/16"
13/64"	29/64"
7/32"	15/32"
15/64"	31/64"
1/4"	1/2"
17/64"	33/64"
9/32"	17/32"
19/64"	35/64"
5/16"	9/16"

DRILL SIZES
No. 52 THRU Z

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

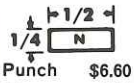
★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

★ IF SMALLEST DIMENSION IS LESS THAN 1/8", PRICE QUOTED ON APPLICATION

TYPE M

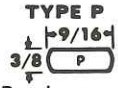
Punch $ 7.70
Die 11.50

TYPE N



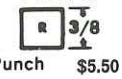
Punch $6.60
Die 9.35

TYPE P



Punch $ 7.70
Die 11.50

TYPE R



Punch $5.50
Die 9.35

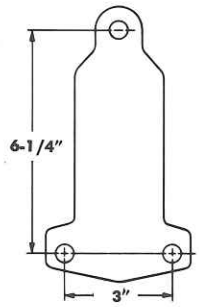
TYPE S

Punch $ 7.70
Die 11.50

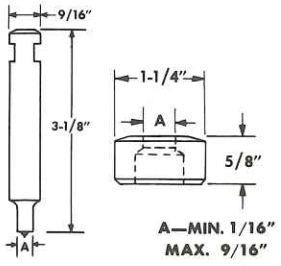
TYPE T

Punch $ 7.70
Die 11.50

No. 16 BASE MOUNTING HOLES



DIMENSIONS OF PUNCHES AND DIES FOR No. 16 PUNCH



No. 16 PUNCH & No. 20 DIE

TO PUNCH BURR FREE HOLES ORDER DIES (FEMALE) AS FOLLOWS:

22 Gauge and Lighter — State Gauge
12 Gauge and Lighter — Flat Top Dies
11 Gauge and Heavier — Crown Top Dies

SPECIFICATIONS

Capacity	⅜" hole thru ¼" mild steel
Depth of Throat	3¼"
Space between Punch and Die	⅜"
Length of Handle	24½"
Weight	26½ lbs.

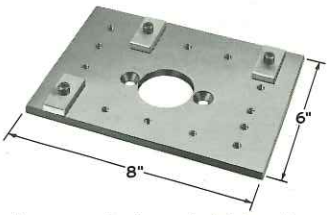
NET PRICES — F.O.B. FACTORY

No. 16 Roller Bearing Bench Punch	$55.00
No. 16 Standard Round Punch	1.40
No. 20 Standard Round Die	1.40
No. 16 Drill Size Punch — No. 52 thru Z	1.65
No. 20 Drill Size Die — No. 52 thru Z	1.65

WORK TABLE

Price No. 16 Work Table	$ 8.25
Weight No. 16 Work Table	3½ lbs.

No. 16 WORK TABLE



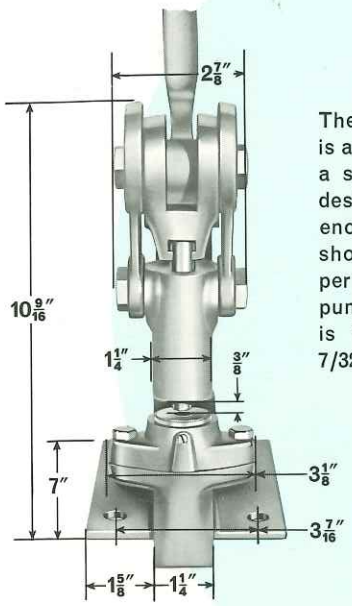
A convenient work table, size 6" x 8" with ¼"-20 tapped holes located for attaching stops available. Three stops are furnished with table.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

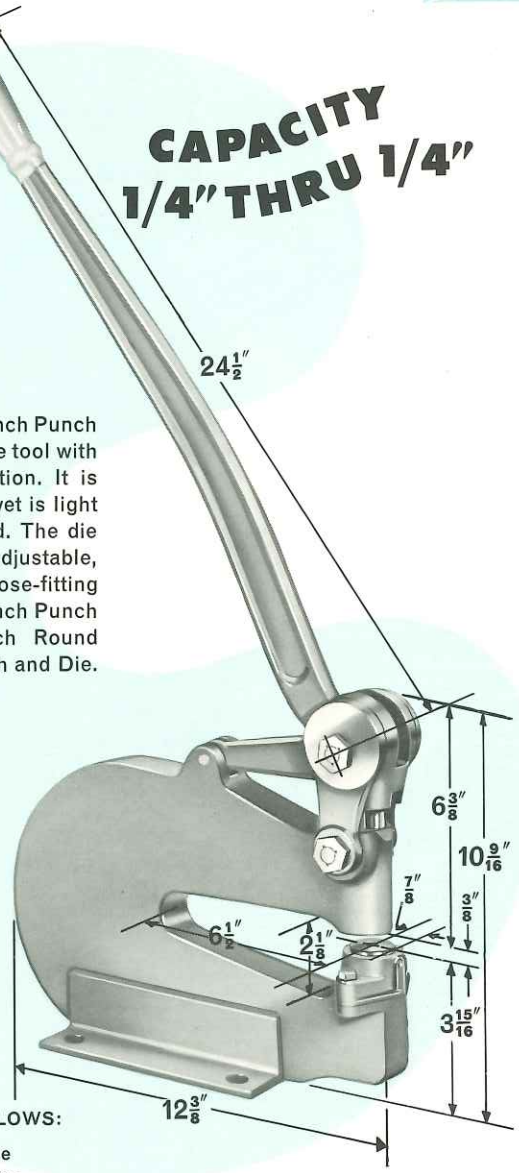
No. 17 ROLLER BEARING PUNCH

5 TONS PUNCHING POWER

CAPACITY 1/4" THRU 1/4"



The No. 17 Roller Bearing Bench Punch is a powerful, easy-to-operate tool with a smooth roller bearing action. It is designed for fixed location, yet is light enough to be carried around. The die shoe is removable and adjustable, permitting the use of close-fitting punches and dies. No. 17 Bench Punch is furnished with one each Round 7/32", 9/32", and 11/32" Punch and Die.



STANDARD ROUND PUNCH AND DIE SIZES

1/16"	21/64"
3/32"	11/32"
7/64"	23/64"
1/8"	3/8"
9/64"	25/64"
5/32"	13/32"
11/64"	27/64"
3/16"	7/16"
13/64"	29/64"
7/32"	15/32"
15/64"	31/64"
1/4"	1/2"
17/64"	33/64"
9/32"	17/32"
19/64"	35/64"
5/16"	9/16"

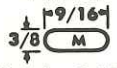
DRILL SIZES
No. 52 THRU Z

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

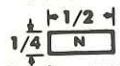
★ IF SMALLEST DIMENSION IS LESS THAN 1/8", PRICE QUOTED ON APPLICATION

TYPE M



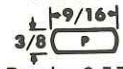
Punch $ 7.70
Die 11.50

TYPE N



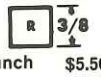
Punch $6.60
Die 9.35

TYPE P



Punch $ 7.70
Die 11.50

TYPE R



Punch $5.50
Die 9.35

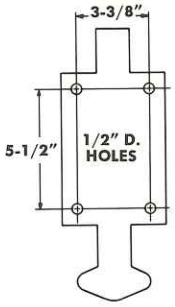
TYPE S

Punch $ 7.70
Die 11.50

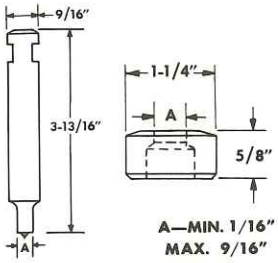
TYPE T

Punch $ 7.70
Die 11.50

No. 17 BASE MOUNTING HOLES



DIMENSIONS OF PUNCHES AND DIES FOR No. 17 PUNCH



No. 17 PUNCH & No. 20 DIE

TO PUNCH BURR FREE HOLES ORDER DIES (FEMALE) AS FOLLOWS:

22 Gauge and Lighter — State Gauge
12 Gauge and Lighter — Flat Top Dies
11 Gauge and Heavier — Crown Top Dies

SPECIFICATIONS

Capacity	¼" hole thru ¼" mild steel
Depth of Throat	6½"
Space between Punch and Die	⅜"
Length of Handle	24½"
Weight	38½ lbs.

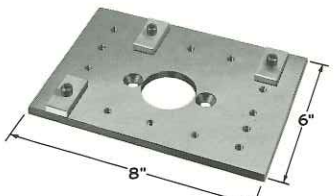
NET PRICES — F.O.B. FACTORY

No. 17 Roller Bearing Bench Punch	$82.50
No. 17 Standard Round Punch	1.40
No. 20 Standard Round Die	1.40
No. 17 Drill Size Punch — No. 52 thru Z	1.65
No. 20 Drill Size Die — No. 52 thru Z	1.65

WORK TABLE

Price No. 17 Work Table	$8.25
Weight No. 17 Work Table	3½ lbs.

No. 17 WORK TABLE



A convenient work table, size 6" x 8" with ¼"-20 tapped holes located for attaching stops available. Three stops are furnished with table.

Additional Round, Drill Size, Riveting, and Irregular Shaped Punches and Dies — shown on the left hand side of this page — are available from stock.

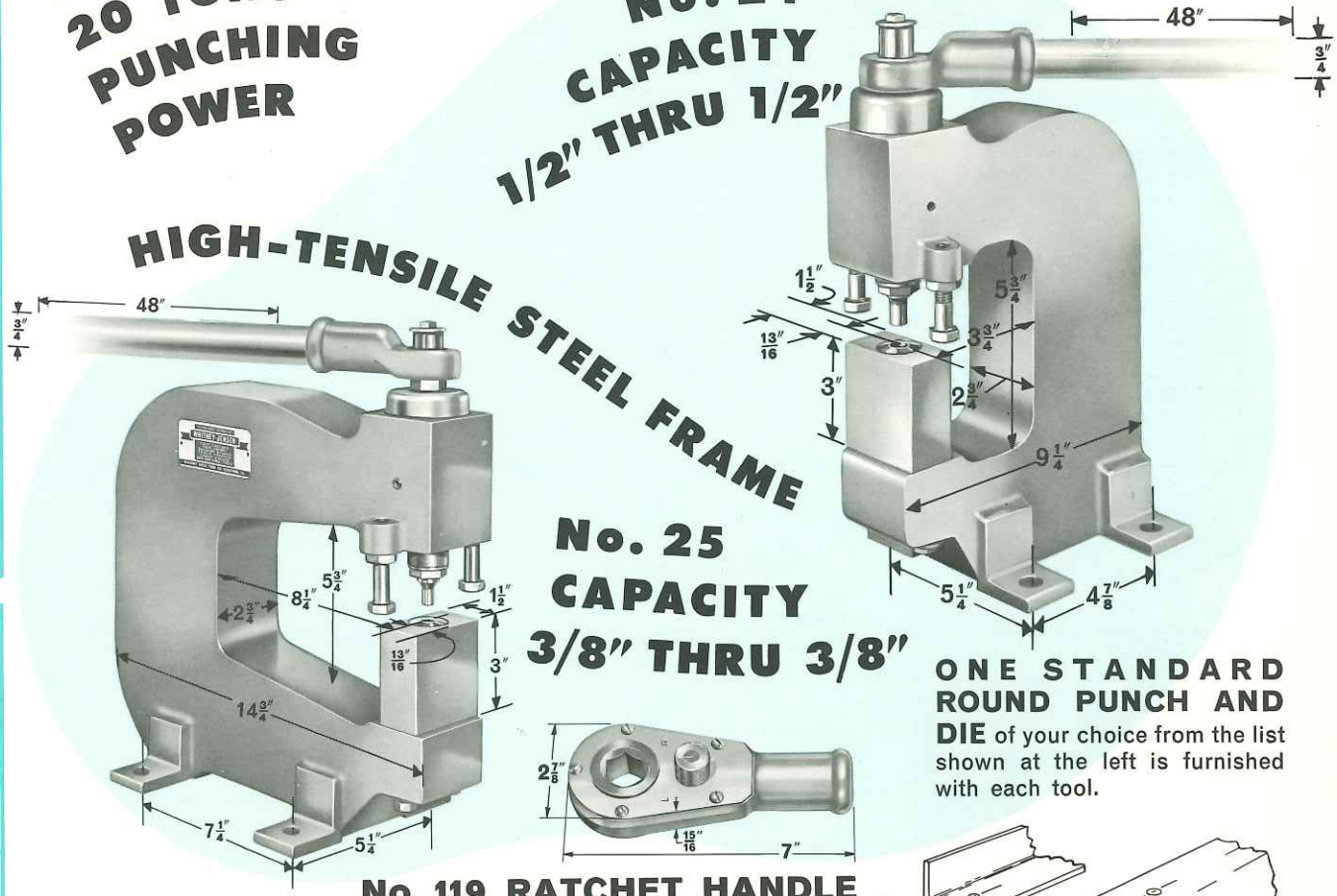
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

11 TONS AND 20 TONS PUNCHING POWER

No. 24 CAPACITY 1/2" THRU 1/2"

HIGH-TENSILE STEEL FRAME

No. 25 CAPACITY 3/8" THRU 3/8"



STANDARD ROUND PUNCH AND DIE SIZES

1/8"	27/64"
9/64"	7/16"
5/32"	29/64"
11/64"	15/32"
3/16"	31/64"
13/64"	1/2"
7/32"	33/64"
15/64"	17/32"
1/4"	35/64"
17/64"	9/16"
9/32"	37/64"
19/64"	19/32"
5/16"	39/64"
21/64"	5/8"
11/32"	41/64"
23/64"	21/32"
3/8"	43/64"
25/64"	11/16"
13/32"	

SPECIAL
3/4" 13/16"

RIVETING
1/8" 5/32" 3/16" 7/32" 1/4" 9/32" 5/16" 11/32" 3/8"

IRREGULAR SHAPED PUNCHES & DIES SHOWN BELOW ARE SIZES STOCKED

★ FOR ANY SIZE NOT SHOWN, ADD 20% TO PRICES SHOWN

★ IF SMALLEST DIMENSION IS LESS THAN 1/8", PRICE QUOTED ON APPLICATION

TYPE M — 11/16 — 1/2 — M
Punch $11.50
Die 11.50
*Stripper 12.25

TYPE N — 9/16 — 3/8 — N
Punch $ 9.35
Die 9.35
*Stripper 13.50

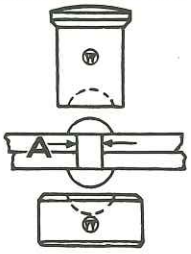
TYPE P — 11/16 — 1/2 — P
Punch $11.50
Die 11.50
*Stripper 13.50

TYPE R — R — 15/32
Punch $ 9.35
Die 9.35
*Stripper 12.25

TYPE S — S — 19/32
Punch $11.50
Die 11.50
*Stripper 13.50

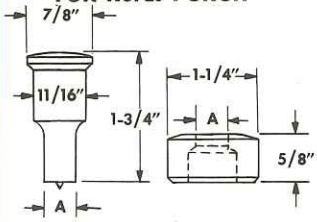
TYPE T — T — 19/32
Punch $11.50
Die 11.50
*Stripper 13.50

No. 20 RIVETING PUNCHES AND DIES



PRICE PER SET $5.50
A — 1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8" DIAMETER OF RIVET

DIMENSIONS OF PUNCHES AND DIES FOR No. 20 PUNCH

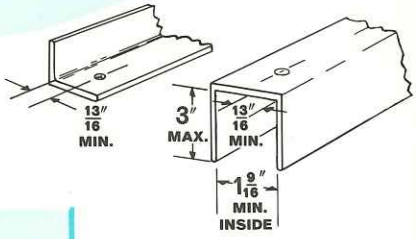


A — MIN. 1/8", MAX. 13/16"
No. 20 PUNCH & DIE

No. 119 RATCHET HANDLE

The No. 119 Ratchet Handle is convenient when working in a limited area. A piece of standard 3/4" pipe of desired length may be inserted in the No. 119 Ratchet Handle and used as a lever.

ONE STANDARD ROUND PUNCH AND DIE of your choice from the list shown at the left is furnished with each tool.



SPECIFICATIONS

	No. 24	No. 25
Capacity, round hole thru Mild Steel	1/2"thru1/2"	3/8"thru3/8"
Depth of Throat	3 3/4"	8 1/4"
Space between Punch and Die	3/4"	3/4"
Length of No. 119 Ratchet Handle	7"	7"
Weight of Punch	75 1/2 lbs.	142 lbs.
Weight of 48" Pipe Handle	4 lbs.	4 lbs.
Weight of No. 119 Ratchet Handle	4 1/2 lbs.	4 1/2 lbs.
NET PRICES — F.O.B. FACTORY		
Ball Bearing Bench Punch	$85.00	$132.00
No. 119 Ratchet Handle	24.00	24.00
48" Pipe Handle	4.40	4.40
No. 20 Standard Round Punch, 1/8" thru 11/16"	1.40	1.40
No. 20 Standard Round Die, 1/8" thru 11/16"	1.40	1.40
No. 20 Special Round Punch, 3/4" or 13/16"	2.20	2.20
No. 20 Special Round Die, 3/4" or 13/16"	2.20	2.20
No. 20 Special Punch Coupler, for 3/4"	2.75	2.75
No. 20 Special Split Punch Coupler, for 13/16"	2.75	2.75
No. 20 Riveting Punch, 1/8" thru 3/8"	2.75	2.75
No. 20 Riveting Die, 1/8" thru 3/8"	2.75	2.75

These Punches are designed to be used in stationary positions. The throat depth and throat height make the No. 24 and No. 25 very versatile tools. The No. 119 Ratchet Handle serves to speed punching operations and minimize effort. A piece of standard 3/4" pipe of desired length may be inserted in Ratchet or Operating Handle and used as a lever.

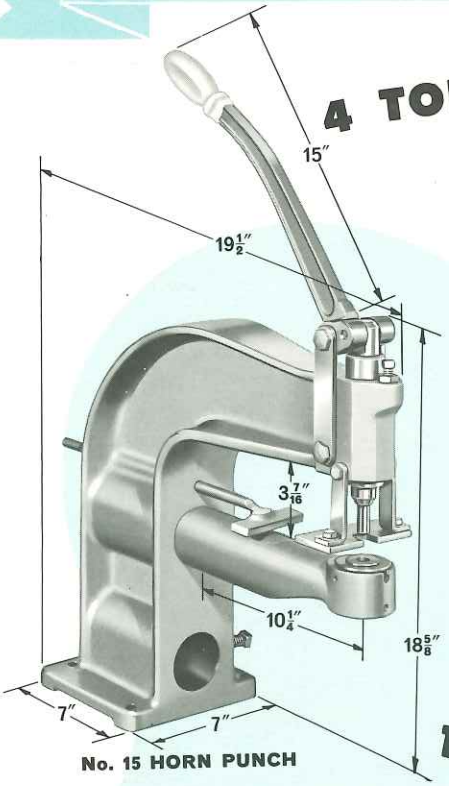
Use of ball bearings between the spindle and punch body enables this type of Punch to develop nearly 20 tons of punching pressure.

Additional Round, Special Round, Riveting, and Irregular Shaped Punches and Dies — shown on the left-hand side of this page — are available from stock.

No. 15 PEDESTAL TYPE HORN PUNCH

4 TONS PUNCHING POWER

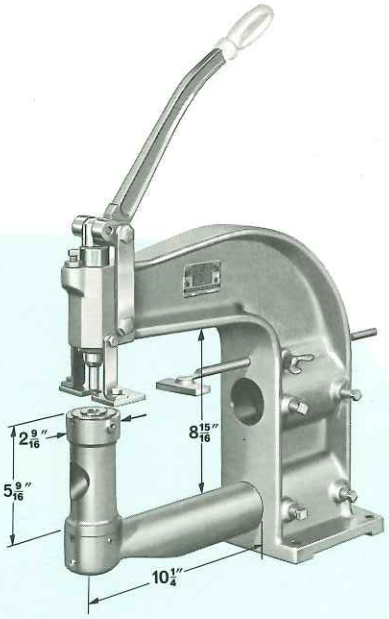
TWO HORN POSITIONS



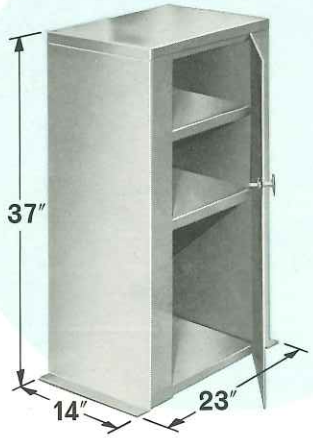
No. 15 HORN PUNCH

No. 15 PUNCH

CAPACITY 1-7/16″ THRU 20 GA.



No. 15 PEDESTAL TYPE HORN PUNCH

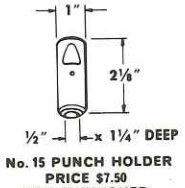


No. 15 FLOOR STAND

LARGEST PUNCHES AND DIES NO. 15 WILL ACCOMMODATE	
○	1-7/16″ Round
□	1-1/16″ Square
▭	1/2″ x 1″ Type N
⬭	15/16″ x 1″ Type M

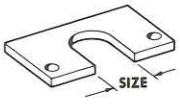
The No. 15 Pedestal Type Horn Punch will aid in a variety of punching requirements; canopies, cylinders, and other irregular shaped objects, within capacity, may be fabricated. A large range of Round and Irregular Shaped Punches and Dies are available.

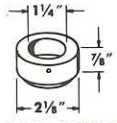
AUXILIARY ATTACHMENTS FOR No. 15 PUNCH



No. 15 PUNCH HOLDER
PRICE $7.50
NOT FURNISHED WITH No. 15

No. 15 STRIPPER ARMS
PRICE $10.00
NOT FURNISHED WITH No. 15





No. 15 DIE ADAPTOR
PRICE $4.50
NOT FURNISHED WITH No. 15

STRIPPER PLATES		
SIZE	CAPACITY	PRICE
A6	Punch Size to 1/2″	$5.00
B6	Punch Size to 1″	5.00
C6	Punch Size to 1-9/16″	5.50

ORDER STRIPPER PLATES IN ACCORDANCE WITH PUNCH SIZE NOT FURNISHED WITH No. 15

ALL PRICES NET—F.O.B. FACTORY

SPECIFICATIONS

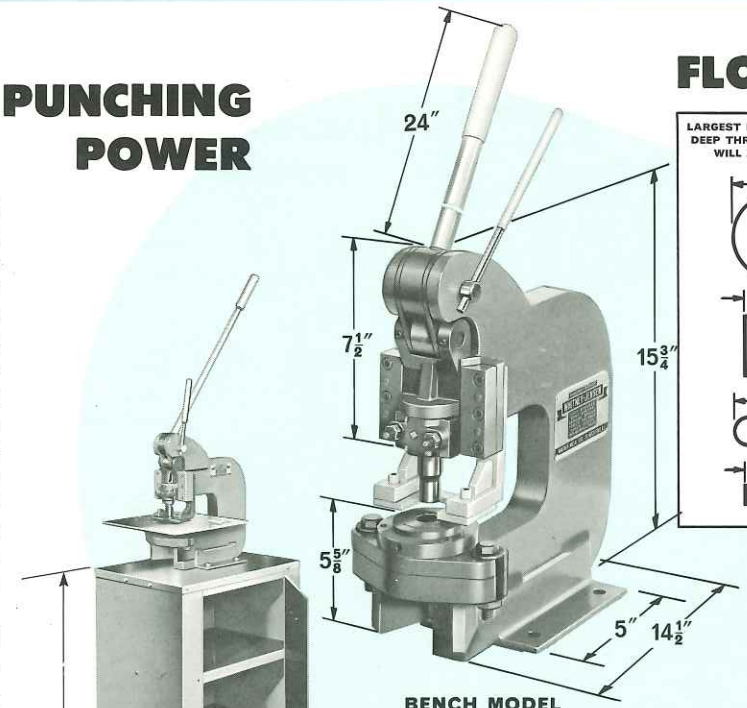
Capacity, Mild Steel	17/16″ thru 20 ga.
Length of Stroke	1¼″
Diameter of Punch Shank Hole in Ram	1″
Weight of No. 15 Punch Only	71 lbs.
Weight of No. 15 Floor Stand Only	75 lbs.
Weight of No. 15 Horn Only	21 lbs.
Weight of No. 15 Pedestal Die Holder Only	4½ lbs.
NET PRICES — F.O.B. FACTORY	
No. 15 Punch Only	$125.00
No. 15 Floor Stand Only	35.00
No. 15 Horn Only	35.00
No. 15 Pedestal Die Holder Only	15.00

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

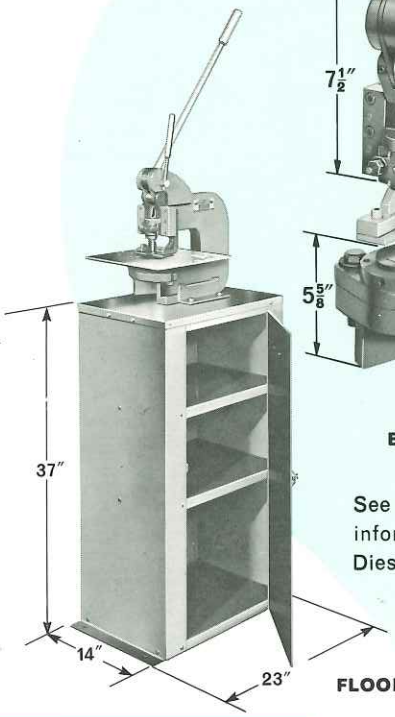
4 TONS PUNCHING POWER

The Deep Throat Hand Punch is actuated by an eccentric cam rolling on a heavy duty bearing. The ram is held securely by gibs. The Die Shoe is removable and adjustable, permitting the use of close-fitting Punches and Dies. An eccentric on the main pivot shaft provides 3/16″ adjustment in ram position. The Deep Throat Hand Punch has 2 Throat Depths 7″ and 12″, and is available in Bench or Floor Models. A convenient Gauge Work Table, 12″ by 12″, with 3 adjustable stops is available.

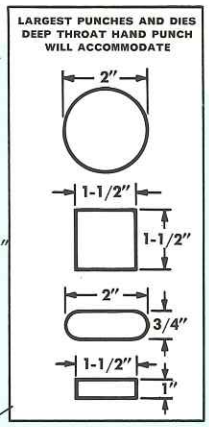
The Floor Model Punch is mounted on a steel stand containing three completely enclosed shelves with hinged door. This allows ample storage space for Punches, Dies, and Auxiliary Attachments.



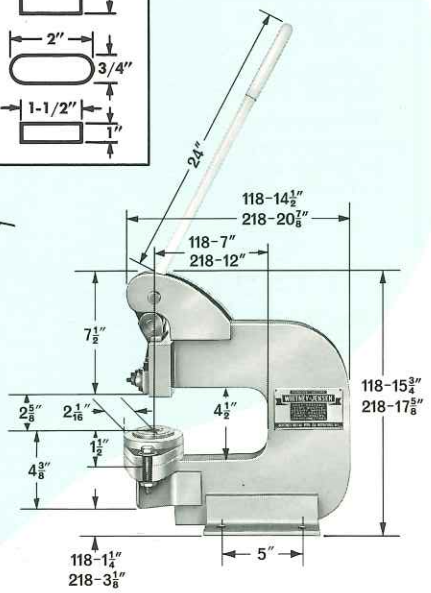
BENCH MODEL



FLOOR MODEL

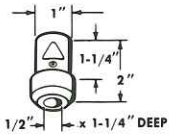


FLOOR OR BENCH MODELS 7″ & 12″ THROAT DEPTHS

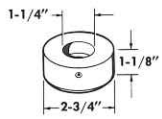


See pages 35 thru 54 for information on Punches, Dies and Accessories.

AUXILIARY ATTACHMENTS

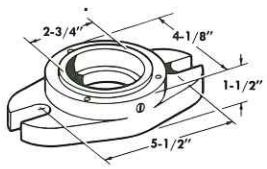


F8 PUNCH HOLDER
PRICE $7.50
FURNISHED WITH PUNCH

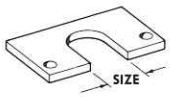


No. 20 DIE ADAPTOR
PRICE $5.00
FURNISHED WITH PUNCH

No. 40 DIE ADAPTOR
PRICE $5.00
FURNISHED WITH PUNCH

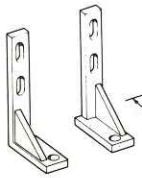


118-2¾ DIE SHOE
PRICE $12.50
FURNISHED WITH PUNCH

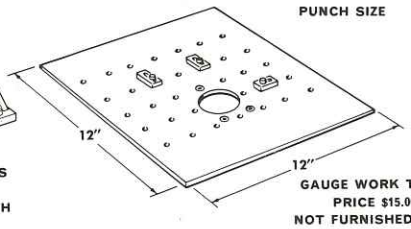


STRIPPER PLATES		
SIZE	CAPACITY	PRICE
A6	Punch Size to 1/2″	$5.50
A6 furnished		
B6	Punch Size to 1″	5.50
C6	Punch Size to 2″	6.00

ORDER STRIPPER PLATES IN ACCORDANCE WITH PUNCH SIZE



STRIPPER ARMS
PRICE $11.00
FURNISHED WITH PUNCH



GAUGE WORK TABLE
PRICE $15.00
NOT FURNISHED WITH PUNCH

ALL PRICES NET—F.O.B. FACTORY

GREATER VERSATILITY

SPECIFICATIONS

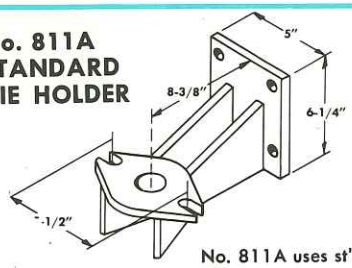
Capacity, Mild Steel 2″ hole thru 14 ga. — 1/4″ hole thru 3/16″

	No. 118	No. 218
Depth of Throat	7″	12″
Die Space, Punch in Highest Position	3/4″	3/4″
Height of Throat, with Work Table	2-3/4″	2-3/4″
Height of Throat, without Work Table	4-1/2″	4-1/2″
Length of Stroke	3/4″	3/4″
Slug Hole Clearance	2-1/4″	2-1/4″
Diameter of Punch Shank Hole in Ram	1″	1″
Floor Space Required	14″ x 23″	14″ x 23″
Weight, Bench Model	103 lbs.	134 lbs.
Weight, Floor Model	200 lbs.	231 lbs.
Weight, Work Table	7 lbs.	7 lbs.
NET PRICES — F.O.B. FACTORY		
Bench Model, Standard Equipment	$137.50	$187.50
Floor Model, Standard Equipment	172.50	222.50

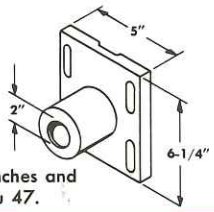
Standard Equipment includes: One L8 Punch Holder, One No. 20 Die Adaptor One No. 40 Die Adaptor, One 118 — 2-3/4″ Die Shoe, Stripper Arms, One A6 Stripper Plate, Standard 1/2″ Round Punch and Die.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. 811A STANDARD DIE HOLDER



No. 811E HORN ADAPTOR



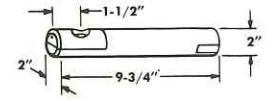
No. 811A uses st'd. punches and dies. See pages 41 thru 47.

Nos. 811B, C, D use special No. 8 Round punches to ½" or special No. 28 round punches. Add $3.00 to prices on pages 41, 42, 43.

Irregular shaped tooling for 811B, C, D. Add 20% to price per set on pages 43 thru 47.

When ordering — Specify Horn Number.

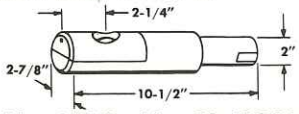
811B Horn uses special No. 20 round dies. Add $3.00 to st'd. No. 20 dies on pages 41, 42, 43.



No. 811B No. 20 HORN

MAX. SIZE	
○	13/16" ROUND
□	1/2" SQUARE
▭	7/16" x 1/2" TYPE N
⬭	9/16" x 11/16" TYPE M

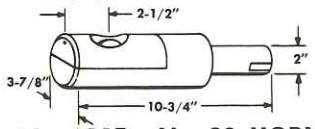
811C Horn uses special No. 40 round dies. Add $3.75 to st'd. No. 40 dies on pages 41, 42, 43.



No. 811C No. 40 HORN

MAX. SIZE	
○	1-7/16" ROUND
□	1-1/16" SQUARE
▭	1/2" x 1" TYPE N
⬭	15/16" x 1" TYPE M

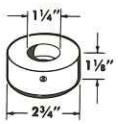
811D Horn uses special No. 28 round dies. Add $4.50 to st'd. No. 28 dies on pages 41, 42, 43.



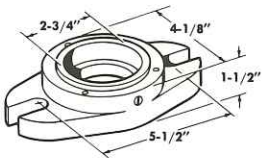
No. 811D No. 28 HORN

MAX. SIZE	
○	2" ROUND
□	1-1/2" SQUARE
▭	1" x 1-1/2" TYPE N
⬭	3/4" x 2" TYPE M

AUXILIARY ATTACHMENTS FOR No. 811 PUNCH

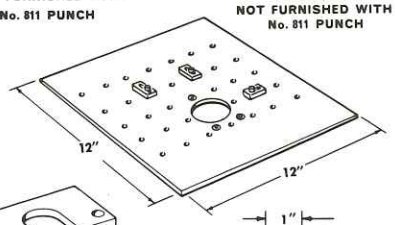


No. 20 DIE ADAPTOR
PRICE $5.00
NOT FURNISHED WITH
No. 811 PUNCH



118—2-3/4 DIE SHOE
PRICE $12.50
NOT FURNISHED WITH
No. 811 PUNCH

No. 40 DIE ADAPTOR
PRICE $5.00
NOT FURNISHED WITH
No. 811 PUNCH

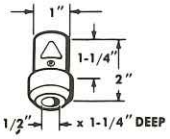


GAUGE WORK TABLE
PRICE $15.00
NOT FURNISHED WITH
No. 811 PUNCH

STRIPPER PLATES

STRIPPER PLATES		
SIZE	CAPACITY	PRICE
A6	Punch Size to ½"	$5.50
B6	Punch Size to 1"	5.50
C6	Punch Size to 2"	6.00

ORDER STRIPPER PLATES IN ACCORDANCE WITH PUNCH SIZE
NOT FURNISHED WITH
No. 811 PUNCH



L8 PUNCH HOLDER
PRICE $7.50
NOT FURNISHED WITH
No. 811 PUNCH

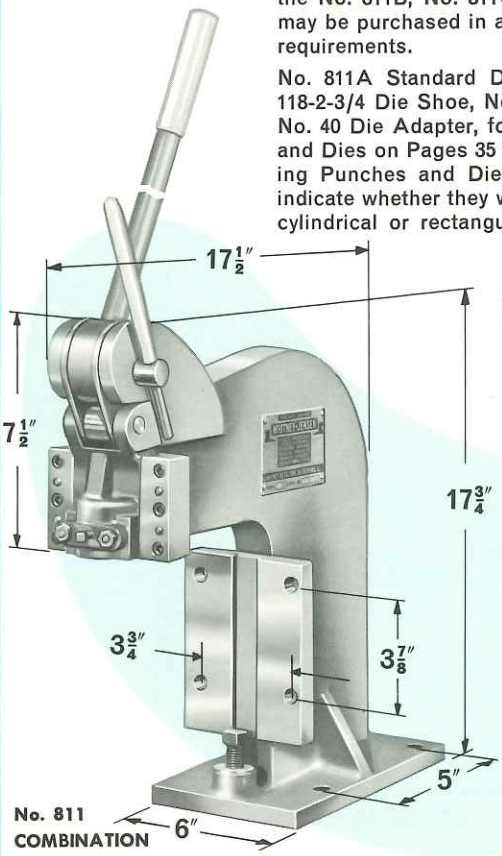
STRIPPER ARMS
PRICE $11.00
NOT FURNISHED WITH
No. 811 PUNCH

ALL PRICES NET—F.O.B. FACTORY

4 TONS PUNCHING POWER

The No. 811 Horn Type Punch is intended for use in fabricating cylindrical and rectangular objects. The No. 811 Combination Horn Punch and No. 811E Horn Adapter should be purchased as a basic unit, then the No. 811B, No. 811C or No. 811D Horns may be purchased in accordance with your requirements.

No. 811A Standard Die Holder uses No. 118-2-3/4 Die Shoe, No. 20 Die Adapter or No. 40 Die Adapter, for Standard Punches and Dies on Pages 35 thru 54. When ordering Punches and Dies, it is important to indicate whether they will be used to punch cylindrical or rectangular objects.



No. 811
COMBINATION
HORN PUNCH

ADJUSTABLE VERSATILE 3 HORN SIZES

No. 811
FLOOR STAND

SPECIFICATIONS

Capacity, Mild Steel, using No. 811B Horn	13/16" hole thru 18 ga.
Capacity, Mild Steel, using No. 811C Horn	1 7/16" hole thru 18 ga.
Capacity, Mild Steel, using No. 811D Horn	2" hole thru 20 ga.
Depth of Throat	7½"
Space between Punch and Die — Punch in Highest Position	¾"
Height of Throat — Horn in Position	2¼"
Slug Clearance, No. 811B Horn in Position	⅞"
Slug Clearance, No. 811C Horn in Position	1½"
Slug Clearance, No. 811D Horn in Position	2⅛"
Diameter Punch Shank Hole in Ram	1"
Weight of No. 811 Combination Horn Punch	102 lbs.
Weight of No. 811A Standard Die Holder	19 lbs.
Weight of No. 811E Horn Adaptor	8 lbs.
Weight of No. 811B No. 20 Horn	8 lbs.
Weight of No. 811C No. 40 Horn	14 lbs.
Weight of No. 811D No. 28 Horn	25 lbs.
Weight of Floor Stand	75 lbs.

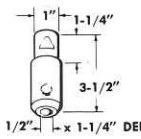
NET PRICES—F.O.B. FACTORY

No. 811 Combination Horn Punch	$110.00
No. 811A Standard Die Holder	40.00
No. 811E Horn Adaptor	30.00
No. 811B No. 20 Horn	35.00
No. 811C No. 40 Horn	50.00
No. 811D No. 28 Horn	60.00
No. 811 Floor Stand	35.00

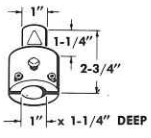
No. 027 DEEP THROAT PUNCH

CAPACITY 19 TONS

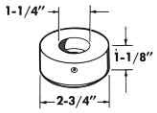
AUXILIARY ATTACHMENTS FOR No. 027 PUNCH



F8 PUNCH HOLDER
PRICE $7.50
FURNISHED WITH PUNCH

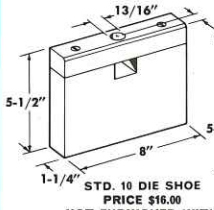


F28 PUNCH HOLDER
PRICE $11.00
FURNISHED WITH PUNCH

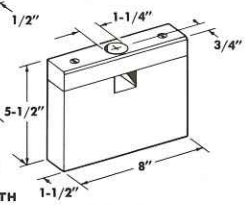


No. 20 DIE ADAPTOR
PRICE $5.00
FURNISHED WITH PUNCH

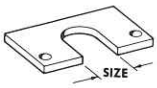
No. 40 DIE ADAPTOR
PRICE $5.00
FURNISHED WITH PUNCH



STD. 10 DIE SHOE
PRICE $16.00
NOT FURNISHED WITH PUNCH



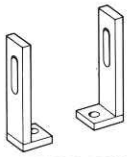
STD. 20 DIE SHOE
PRICE $16.00
NOT FURNISHED WITH PUNCH



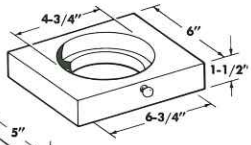
STRIPPER PLATES

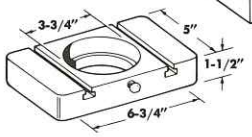
SIZE	CAPACITY	PRICE
A7	Punch Size to ½"	$6.00
	(A7 furnished with Press)	
B7	Punch Size to 1"	6.00
C7	Punch Size to 2"	6.60
D7	Punch Size to 3"	6.60
E7	Punch Size to 4"	7.15

ORDER STRIPPER PLATES IN ACCORDANCE WITH PUNCH SIZE



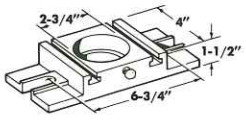
STRIPPER ARMS
PRICE $10.00
FURNISHED WITH PUNCH



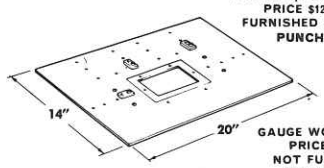


F 4-3/4 DIE SHOE
PRICE $30.00
NOT FURNISHED WITH PUNCH

F 3-3/4 DIE SHOE
PRICE $22.00
NOT FURNISHED WITH PUNCH



F STD. 2-3/4 DIE SHOE
PRICE $12.50
FURNISHED WITH PUNCH



GAUGE WORK TABLE
PRICE $24.00
NOT FURNISHED WITH PUNCH

ALL PRICES NET—F.O.B. FACTORY

ACCURATE RAM TRAVEL

ALL STEEL WELDED FRAME

DEEP and HIGH THROATS

LARGE SELECTION OF STANDARD PUNCHES and DIES AVAILABLE

See pages 35 thru 54 for information on Punches, Dies and Accessories.

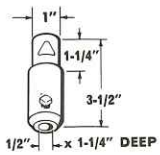
SPECIFICATIONS and NET PRICES — F.O.B. FACTORY

	No. 027
Capacity, ½" hole thru ½" mild steel — or 1" hole thru ¼"	19 tons
Depth of Throat	24"
Height of Throat — at Ram	10"
Length of Stroke	1¼"
Die Space less Die Shoe Support	10"
Die Space with Die Shoe Support in Position	6"
Diameter of Punch Shank Hole in Ram	1"
Depth of Punch Shank Hole in Ram	1¼"
Slug Clearance	3" x 5"
Bed Plate Holes — Center to Center	6¾"
Floor Space Required	20" x 36"
Weight of No. 027 Punch Only	800 lbs.
Weight of No. 027 Stand Only	90 lbs.
Price — No. 027 Punch only with Standard Equipment	$425.00
Price — No. 027 Punch only without Standard Equipment	$410.00
Price — No. 027 Punch Mounted on Stand with Standard Equipment	$460.00
Price — No. 027 Punch Mounted on Stand without Standard Equipment	$445.00

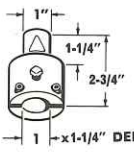
Standard Equipment includes: One Side Gauge, One Depth Gauge, One F8 Punch Holder, One F28 Punch Holder, One No. 20 Die Adaptor, One No. 40 Die Adaptor, One F2-3/4" O.D. Die Shoe, One Die Shoe Support, One Set 1/2" Round Punch and Die, 32" Bar Handle.

No. 29 No. 58 No. 68

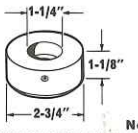
AUXILIARY ATTACHMENTS FOR FOOT PRESSES



F8 PUNCH HOLDER
PRICE $7.50
FURNISHED WITH PRESS

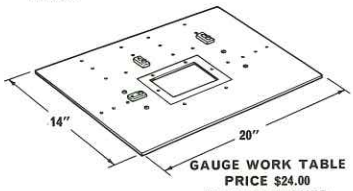


F28 PUNCH HOLDER
PRICE $11.00
FURNISHED WITH PRESS

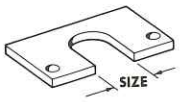


No. 20 DIE ADAPTOR
PRICE $5.00
FURNISHED WITH PRESS

No. 40 DIE ADAPTOR
PRICE $5.00
FURNISHED WITH PRESS

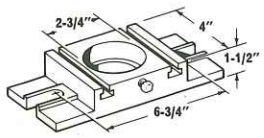


GAUGE WORK TABLE
PRICE $24.00
NOT FURNISHED WITH PRESS

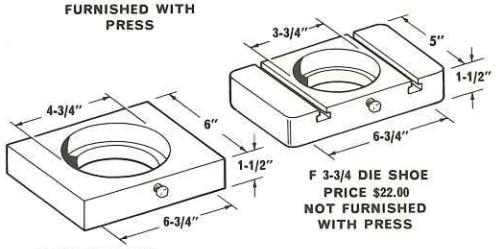


STRIPPER PLATES		
SIZE	CAPACITY	PRICE
A7	Punch Size to ½"	$6.00
(A7 furnished with Press)		
B7	Punch Size to 1"	6.00
C7	Punch Size to 2"	6.60
D7	Punch Size to 3"	6.60
E7	Punch Size to 4"	7.15

ORDER STRIPPER PLATES IN ACCORDANCE WITH PUNCH SIZE

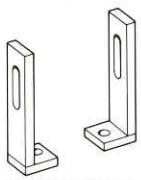


F STD. 2-3/4 DIE SHOE
PRICE $12.50
FURNISHED WITH PRESS



F 3-3/4 DIE SHOE
PRICE $22.00
NOT FURNISHED WITH PRESS

F 4-3/4 DIE SHOE
PRICE $30.00
NOT FURNISHED WITH PRESS

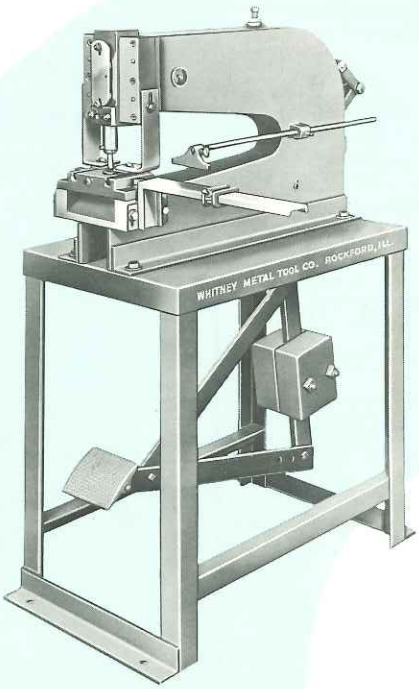


STRIPPER ARMS
PRICE $10.00
FURNISHED WITH PRESS

ALL PRICES NET — F.O.B. FACTORY

CAPACITY 5 TONS

DEEP THROAT



LARGE SELECTION OF STANDARD PUNCHES AND DIES AVAILABLE

See pages 35 thru 54 for Dies and Accessories.

These Toggle Action Foot Presses combine features that make them the most versatile pieces of equipment in any type of metal-working shop. Their deep throats and powerful punching action permit the handling of a variety of work, previously beyond the scope of similar equipment.

SPECIFICATIONS and NET PRICES—F.O.B. FACTORY

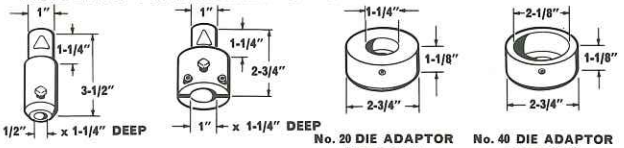
	No. 29	No. 58	No. 68
Capacity, all sizes, 2" hole thru 16 ga. mild steel	5 tons	5 tons	5 tons
Depth of Throat	10"	18"	24"
Height of Throat	5¾"	5¾"	5¾"
Length of Stroke	1"	1"	1"
Adjustment of Ram	¾"	¾"	¾"
Die Space with Stroke Down and Adjustment Up	5"	5"	5"
Diameter of Punch Shank Hole in Ram	1"	1"	1"
Depth of Punch Shank Hole in Ram	1¼"	1¼"	1¼"
Slug Hole Clearance	3" x 5"	3" x 5"	3" x 5"
Bed Plate Holes — Center to Center	6¾"	6¾"	6¾"
Bed Plate Dimensions	4½" x 8¼"	4½" x 8¼"	4½" x 8¼"
Floor Space Required	18" x 25"	18" x 34"	18" x 40"
Weight	375 lbs.	485 lbs.	535 lbs.
Price with Standard Equipment	$250.00	$275.00	$325.00
Price without Standard Equipment	$235.00	$260.00	$310.00

Standard Equipment includes: One Depth Gauge, One Side Gauge, One F8 Punch Holder, One F28 Punch Holder, One No. 20 Die Adaptor, One No. 40 Die Adaptor, One Standard F2¾" Die Shoe, One Set ½" Round Punch and Die.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. 32, No. 33, No. 34

AUXILIARY ATTACHMENTS FOR LEVER PRESSES

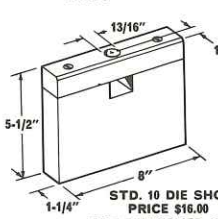


F8 PUNCH HOLDER PRICE $7.50 FURNISHED WITH PRESS

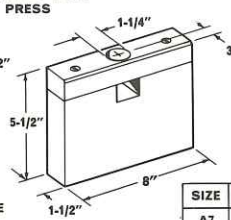
F28 PUNCH HOLDER PRICE $11.00 FURNISHED WITH PRESS

No. 20 DIE ADAPTOR PRICE $5.00 FURNISHED WITH PRESS

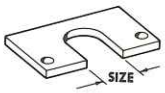
No. 40 DIE ADAPTOR PRICE $5.00 FURNISHED WITH PRESS



STD. 10 DIE SHOE PRICE $16.00 NOT FURNISHED WITH PRESS



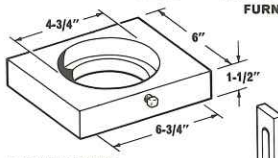
PRICE $16.00 NOT FURNISHED WITH FURNISHED WITH PRESS



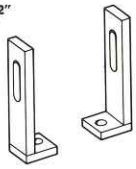
STRIPPER PLATES

SIZE	CAPACITY	PRICE
A7	Punch Size to ½"	$6.00
(A7 furnished with Press)		
B7	Punch Size to 1"	6.00
C7	Punch Size to 2"	6.60
D7	Punch Size to 3"	6.60
E7	Punch Size to 4"	7.15

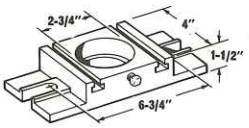
ORDER STRIPPER PLATES IN ACCORDANCE WITH PUNCH SIZE



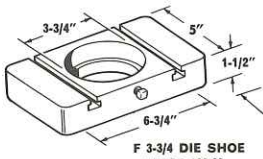
F 4-3/4 DIE SHOE PRICE $30.00 NOT FURNISHED WITH PRESS



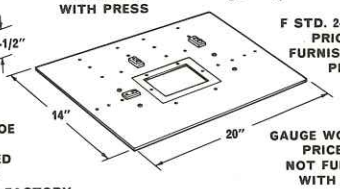
STRIPPER ARMS PRICE $10.00 FURNISHED WITH PRESS



F STD. 2-3/4 DIE SHOE PRICE $12.50 FURNISHED WITH PRESS



F 3-3/4 DIE SHOE PRICE $22.00 NOT FURNISHED WITH PRESS

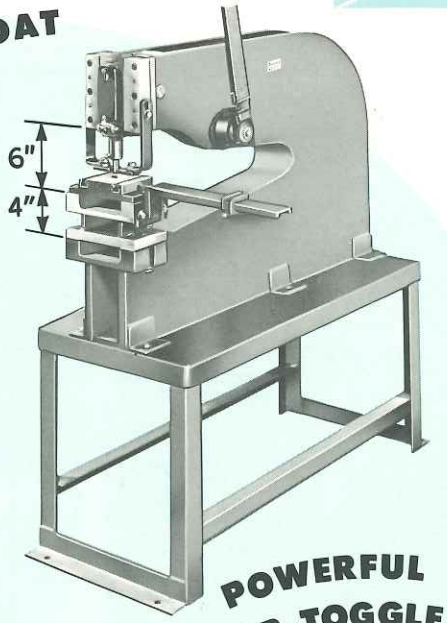


GAUGE WORK TABLE PRICE $24.00 NOT FURNISHED WITH PRESS

ALL PRICES NET—F.O.B. FACTORY

DEEP THROAT

CAPACITY 8 TONS

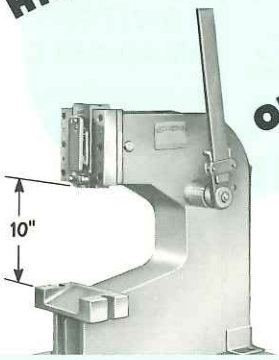


ALL STEEL WELDED FRAME

POWERFUL LEVER-TOGGLE ACTION

HIGH THROAT

LARGE SELECTION OF STANDARD PUNCHES AND DIES AVAILABLE



See pages 35 thru 54 for information on Punches, Dies and Accessories.

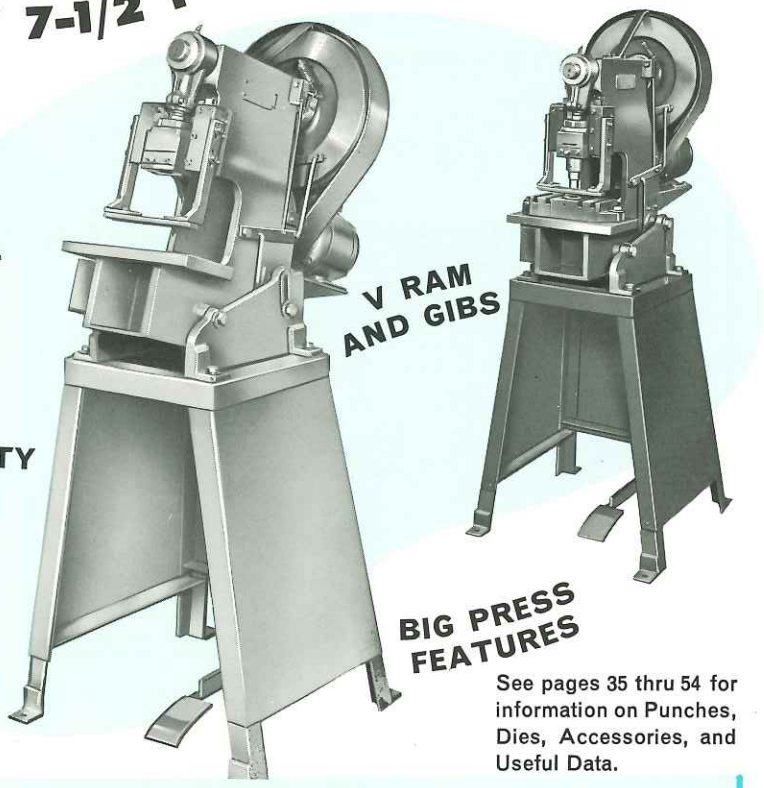
SPECIFICATIONS and NET PRICES—F.O.B. FACTORY

	No. 32	No. 33	No. 34
Capacity, ½" hole thru 3/16" mild steel — or 1¾" hole thru 12 ga.	8 tons	8 tons	8 tons
Depth of Throat	10"	18"	24"
Height of Throat — at Ram	10"	10"	10"
Length of Stroke	1"	1"	1"
Adjustment of Ram	¾"	¾"	¾"
Die Space less Die Shoe Support	10"	10"	10"
Die Space with Die Shoe Support in Position	6"	6"	6"
Diameter of Punch Shank Hole in Ram	1"	1"	1"
Depth of Punch Shank Hole in Ram	1¼"	1¼"	1¼"
Slug Clearance	3" x 5"	3" x 5"	3" x 5"
Bed Plate Holes — Center to Center	6¾"	6¾"	6¾"
Floor Space Required	18" x 25"	18" x 38"	18" x 44"
Weight	345 lbs.	570 lbs.	735 lbs.
Price with Standard Equipment	$300.00	$375.00	$425.00
Price without Standard Equipment	$285.00	$360.00	$410.00

Standard Equipment includes: One Side Gauge, One Depth Gauge, One F8 Punch Holder, One F28 Punch Holder, One No. 20 Die Adaptor, One No. 40 Die Adaptor, One F2¾" OD Die Shoe, One Die Shoe Support, One Set ½" Round Punch and Die, 48" Bar Handle.

No. 127

CAPACITY 7-1/2 TONS



ALL STEEL WELDED FRAME

4 TON SAFETY FACTOR

SOLENOID FOOT TRIP SWITCH AVAILABLE

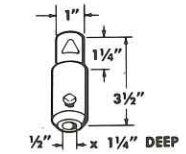
V RAM AND GIBS

BIG PRESS FEATURES

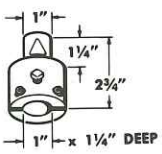
See pages 35 thru 54 for information on Punches, Dies, Accessories, and Useful Data.

AUXILIARY ATTACHMENTS FOR No. 127 POWER PUNCH PRESS

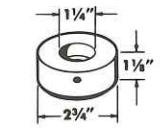
NOT FURNISHED WITH PRESS
MUST BE ORDERED EXTRA



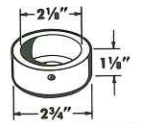
F8 PUNCH HOLDER
PRICE $7.50



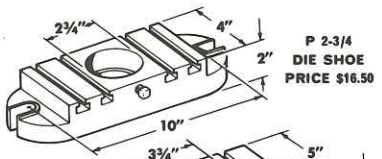
F28 PUNCH HOLDER
PRICE $11.00



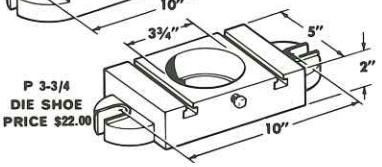
No. 20 DIE ADAPTOR
PRICE $5.00



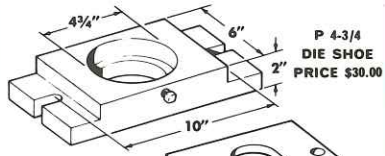
No. 40 DIE ADAPTOR
PRICE $5.00



P 2-3/4 DIE SHOE
PRICE $16.50

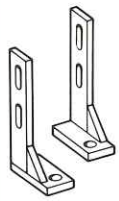


P 3-3/4 DIE SHOE
PRICE $22.00



P 4-3/4 DIE SHOE
PRICE $30.00

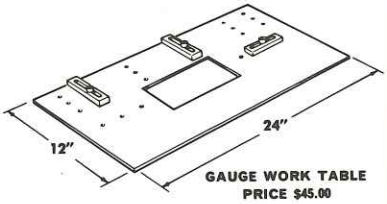
STRIPPER ARMS
PRICE $17.50



STRIPPER PLATES

SIZE	CAPACITY	PRICE
A1	Punches to 1/2"	$5.50
B1	Punches to 1"	5.50
C1	Punches to 2"	6.00
D1	Punches to 3"	6.00
E1	Punches to 4"	6.50

ORDER STRIPPER PLATES IN ACCORDANCE WITH PUNCH SIZE



GAUGE WORK TABLE
PRICE $45.00

ALL PRICES NET—F.O.B. FACTORY

SPECIFICATIONS

Capacity, Mild Steel	7½ Tons
Depth of Throat	6"
Height of Throat	7"
Strokes per Minute	275
Length of Stroke	1"
Adjustment of Ram	1¼"
Die Space, Stroke Down, Adjustment Up	5¾"
Diameter of Punch Hole in Ram	1"
Depth of Punch Hole in Ram	1¼"
Bed Plate Dimensions	6" x 12"
Slug Hole Clearance	4" Rd or 3½" x 5"
Bed Plate Holes — Center to Center	10½"
Diameter and Width of Flywheel	15½" x 2½"
Weight of Flywheel	96 lbs.
Motor	½ HP, 1725 RPM, 60 CY, 1 PH, 110-220 V
Clutch, Pin Type	Non-Repeat
Drive	V-Belt
Floor Space Required	29" x 22"
Height Overall	59"
Height — Floor to top of Bed	35"
Maximum Angle Press may be Tilted	25° (maximum)
Weight	490 lbs.

IMPORTANT: Each Press Furnished with 6-Foot Cord, Ready to Plug In. Be Sure to State Your Electrical Requirements.

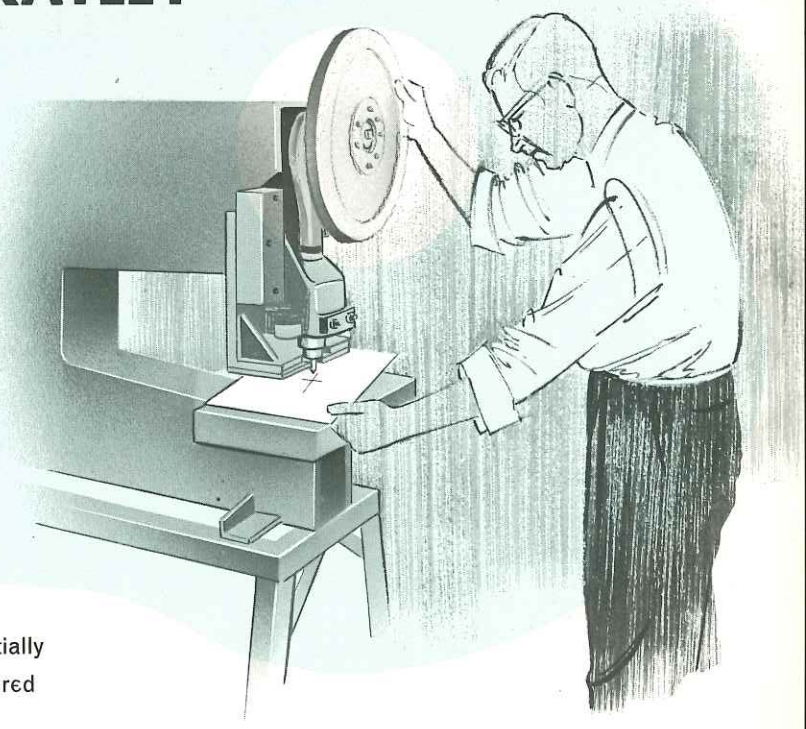
NET PRICES — F. O. B. FACTORY

Inclinable Power Punch Press without Motor	$540.00
Inclinable Power Punch Press with 1 PH 110-220 V Motor	575.00
Inclinable Power Punch Press with 3 PH 220-440 V Motor	590.00
Additional for Solenoid Foot Trip Switch	137.50
Additional for J. I. C. Control	200.00

Machine purchased less motor will be equipped with the following: Switch (state phase desired), Belt, Motor Mounting, Guard, Sheave. Always state complete motor specifications desired.

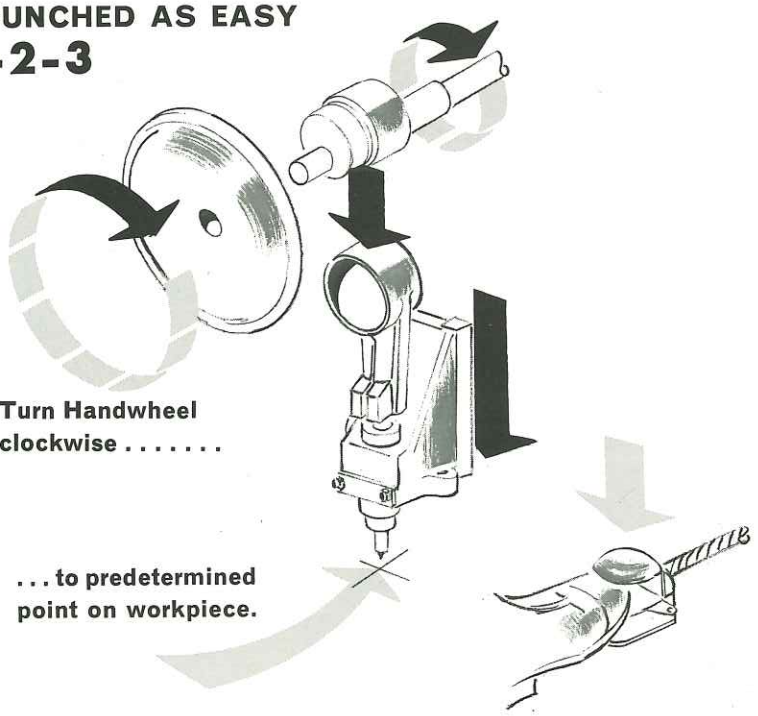
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

NOW!–PUNCH ACCURATELY ON A POWER PRESS WITH THE *NEW* ADJUSTO-RAM CLUTCH



The Whitney-Jensen Adjusto-Ram Clutch is an ingenious mechanical design permitting the operator to lower the punch down to a predetermined point while the punch press is running. When the work is properly positioned, the operator can trip the punch press and complete the punching operation. Inasmuch as the Adjusto-Ram Clutch partially isolates the crank shaft from the clutch hub, two brakes are required to control the normal over-ride of the two rotating members.

NOW-THOSE DIFFICULT PARTS CAN BE POSITIONED AND PUNCHED AS EASY AS 1-2-3



1 Turn Handwheel clockwise . . . . . .

2 . . . to predetermined point on workpiece.

3 Trip punch press to complete the punching operation.

PUNCH ALWAYS RETURNS TO NORMAL POSITION FOLLOWING THE PUNCHING CYCLE

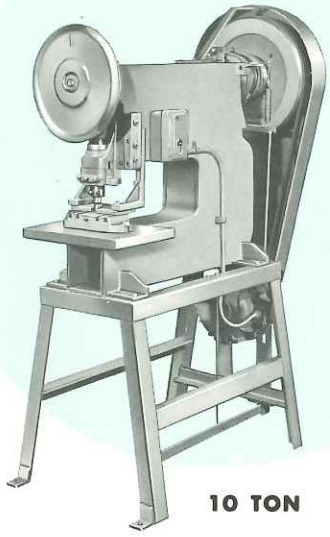
PRESSES EQUIPPED WITH ADJUSTO-RAM CLUTCH MAY ALSO BE USED IN CONVENTIONAL MANNER!

AUXILIARY ATTACHMENTS FOR ADJUSTO-RAM CLUTCH PRESSES

MODEL 129, 130, 150
See page 31
MODEL 230, 231
See page 32
MODEL 331, 336
See page 33

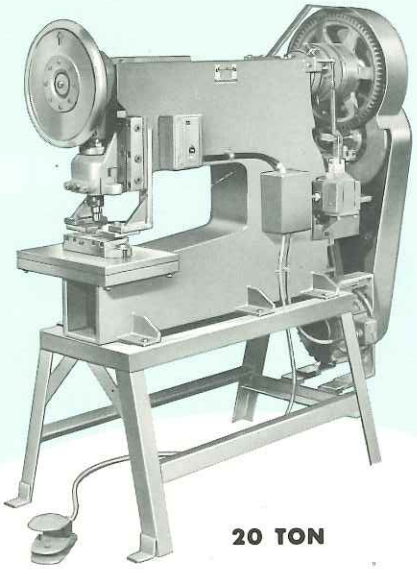
ADJUSTO-RAM CLUTCH IS AVAILABLE AS OPTION ON THESE 7 POWER PUNCH PRESSES

The Adjusto-Ram Clutch can be installed on existing Whitney-Jensen Power Presses shown below. The machine must be returned to our Factory for this rebuilding. Shipment both ways is at customer's expense.



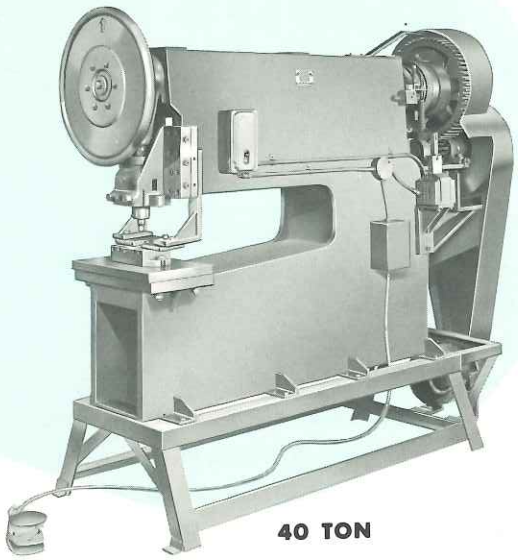
10 TON

MODEL No. 129 - 130 - 150



20 TON

MODEL No. 230 - 231



40 TON

MODEL No. 331 - 336

SPECIFICATIONS AND PRICES FOR ABOVE MACHINES *NOT EQUIPPED* WITH ADJUSTO-RAM CLUTCH MAY BE FOUND ON PAGES 31, 32 AND 33. SPECIFICATIONS FOR PRESSES EQUIPPED WITH AN ADJUSTO-RAM CLUTCH ARE THE SAME AS BASIC MODELS EXCEPT AS NOTED BELOW:

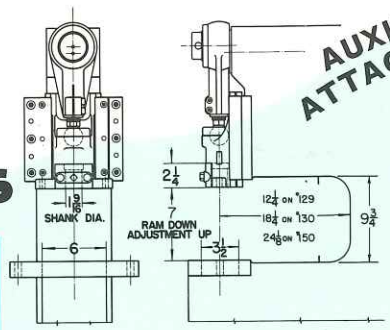
SPECIFICATIONS	10 TON			20 TON		40 TON	
	129	130	150	230	231	330	336
Length of Stroke — with Adjusto-Ram Clutch	1¼"	1¼"	2"	2"	2"	2½"	2½"
Flywheel Weight — with Adjusto-Ram Clutch	250 lbs.	250 lbs.	250 lbs.	160 lbs.	160 lbs.	325 lbs.	325 lbs.
Clutch	Adjusto-Ram & Non-repeat			Adjusto-Ram & Non-repeat		Adjusto-Ram & Non-repeat	
NET PRICES — F.O.B. FACTORY							
Adjusto-Ram Clutch Press without Motor	$1075.00	$1225.00	$1450.00	$1950.00	$2250.00	$3685.00	$4985.00
Adjusto-Ram Clutch Press with 2 or 3 PH, 220-440V Motor	1150.00	1300.00	1525.00	2030.00	2330.00	3785.00	5085.00
Adjusto-Ram Clutch Press with 3 PH, 550V Motor	1150.00	1300.00	1525.00	2030.00	2330.00	3785.00	5085.00
Additional for Solenoid Foot Trip Switch	165.00	165.00	165.00	165.00	165.00	181.50	*Standard
Additional for Air Foot Trip Switch	125.00	125.00	125.00	125.00	125.00	125.00	*Standard
Additional for J.I.C. Control	250.00	250.00	250.00	250.00	250.00	250.00	250.00
Additional for 2" Stroke	120.00	120.00	Standard	Standard	Standard	Does not apply	

Machines purchased less motor will be equipped with the following: Switch (state phase desired), bolts, motor mounting guard. Always state complete motor specifications desired.

*Select one

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. 129 No. 130 No. 150 CAPACITY 10 TONS



AUXILIARY ATTACHMENTS

HIGH SPEED

ALL STEEL WELDED FRAME

DEEP THROAT

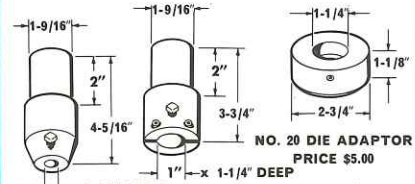
ADJUSTO-RAM CLUTCH AVAILABLE

SOLENOID OR AIR FOOT TRIP SWITCH AVAILABLE

See pages 35 thru 54 for information on Punches, Dies and Accessories.

AUXILIARY ATTACHMENTS FOR No. 129, No. 130, No. 150 POWER PUNCH PRESSES

NOT FURNISHED WITH PRESSES MUST BE ORDERED EXTRA

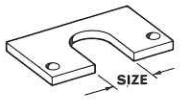


NO. 20 DIE ADAPTOR PRICE $5.00

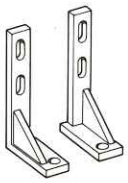
P8 PUNCH HOLDER PRICE $7.50

1/2" x 1-1/4" DEEP

P28 PUNCH HOLDER PRICE $11.00



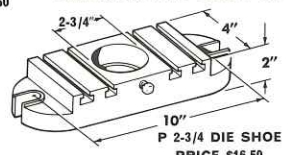
No. 40 DIE ADAPTOR PRICE $5.00



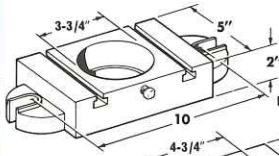
STRIPPER ARMS PRICE $17.50

STRIPPER PLATES		
SIZE	CAPACITY	PRICE
A2	Punch Size to 1/2"	$6.50
B2	Punch Size to 1"	8.75
C2	Punch Size to 2"	10.00
D2	Punch Size to 3"	10.50
E2	Punch Size to 4"	11.50

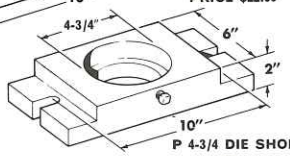
ORDER STRIPPER PLATES IN ACCORDANCE WITH PUNCH SIZE



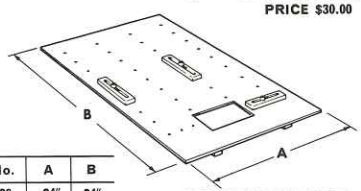
P 2-3/4 DIE SHOE PRICE $16.50



P 3-3/4 DIE SHOE PRICE $22.00



P 4-3/4 DIE SHOE PRICE $30.00



No.	A	B
129	24"	24"
130	24"	28"
150	24"	34"

GAUGE WORK TABLE PRICE $60.00

BE SURE AND INDICATE NUMBER OF PRESS GAUGE WORK TABLE WANTED FOR.

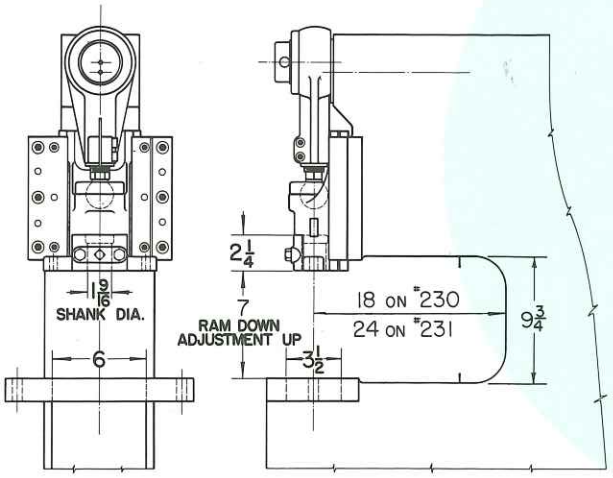
ALL PRICES NET — F.O.B. FACTORY

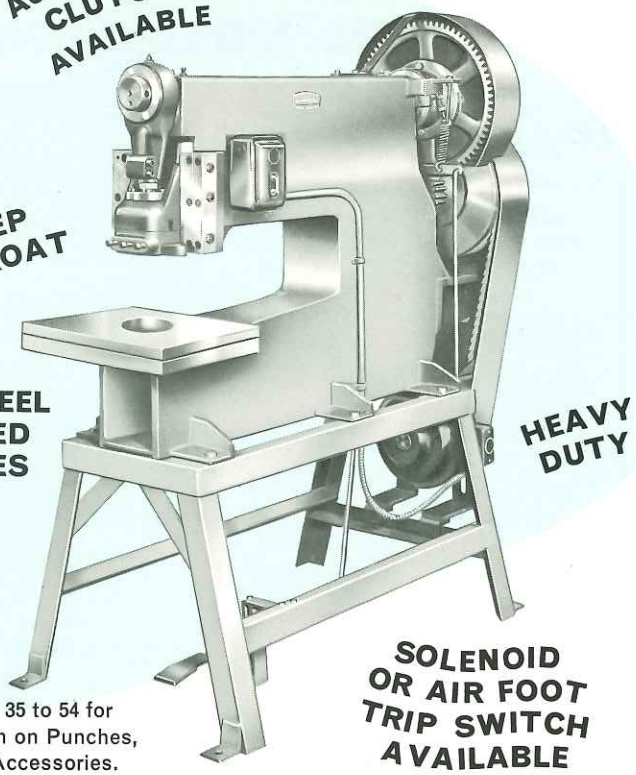
SPECIFICATIONS	No. 129	No. 130	No. 150
Capacity, Mild Steel	10 Tons	10 Tons	10 Tons
Depth of Throat	12"	18"	24"
Height of Throat	9"	9"	9"
Strokes per Minute	175	175	175
Length of Stroke	1¼"	1¼"	2"
Adjustment of Ram	1¾"	1¾"	1¾"
Die Space, Stroke Down, Adjustment Up	7"	7"	7"
Diameter of Punch Shank Hole in Ram	1 5/16"	1 5/16"	1 5/16"
Depth of Punch Shank Hole in Ram	2"	2"	2"
Bolster Plate Dimensions	1" x 12" x 18"	1" x 12" x 18"	1" x 12" x 18"
Slug Hole Clearance	4" Rd or 3½"x6"	4" Rd or 3½"x6"	4" Rd or 3½"x6"
Bolster Plate Holes — Center to Center	10½"	10½"	10½"
Diameter and Width of Flywheel	20" x 2½"	20" x 2½"	20" x 4"
Weight of Flywheel	150 lbs.*	150 lbs.*	250 lbs.
Motor	One HP, 1200 RPM, 60 CY, 3 PH, 220-440 V		
Clutch, Pin Type	Non-Repeat	Non-Repeat	Non-Repeat
Drive	2 V-Belts	2 V-Belts	2 V-Belts
Height Overall	69"	69"	69"
Height, Floor to top of Bed	37"	37"	33-1/2"
Floor Space Required	26" x 35"	26" x 42"	26" x 55"
Weight	1040 lbs.	1140 lbs.	1600 lbs.
NET PRICES — F. O. B. FACTORY			
Deep Throat Power Press without Motor	$775.00	$925.00	$1,150.00
Power Press with 2 or 3 PH, 220-440 V Motor	850.00	1,000.00	1,225.00
Power Press with 3 PH, 550 V Motor	850.00	1,000.00	1,225.00
Additional for 2" Stroke	120.00	120.00	Standard
Additional for Solenoid Foot Trip Switch	165.00	165.00	165.00
Additional for Air Foot Trip Switch	125.00	125.00	125.00
Additional for J. I. C. Control	250.00	250.00	250.00
Additional for Adjusto-Ram Clutch	300.00	300.00	300.00

DEEP THROAT POWER PRESSES

No. 230 No. 231

CAPACITY 20 TONS

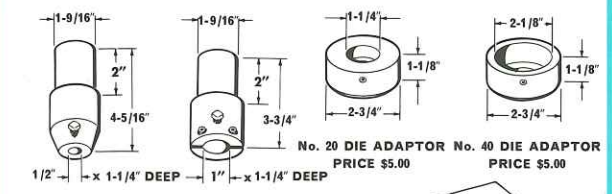




See pages 35 to 54 for information on Punches, Dies and Accessories.

AUXILIARY ATTACHMENTS FOR No. 230 AND No. 231 POWER PUNCH PRESSES

NOT FURNISHED WITH PRESSES — MUST BE ORDERED EXTRA



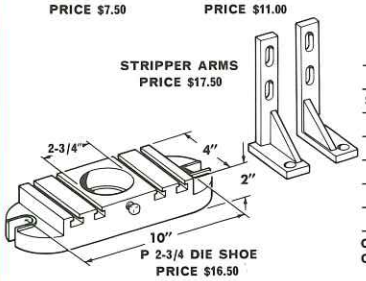
No. 20 DIE ADAPTOR PRICE $5.00

No. 40 DIE ADAPTOR PRICE $5.00

P8 PUNCH HOLDER PRICE $7.50

P28 PUNCH HOLDER PRICE $11.00

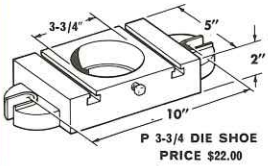
STRIPPER ARMS PRICE $17.50



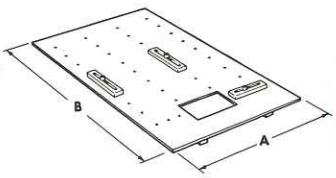
P 2-3/4 DIE SHOE PRICE $16.50

STRIPPER PLATES		
SIZE	CAPACITY	PRICE
A3	Punch Size to 1/2"	$8.25
B3	Punch Size to 1"	10.00
C3	Punch Size to 2"	10.50
D3	Punch Size to 3"	11.00
E3	Punch Size to 4"	12.00

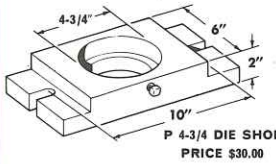
ORDER STRIPPER PLATES IN ACCORDANCE WITH PUNCH SIZE



P 3-3/4 DIE SHOE PRICE $22.00



GAUGE WORK TABLE PRICE $60.00



P 4-3/4 DIE SHOE PRICE $30.00

No.	A	B
230	24"	28"
231	24"	34"

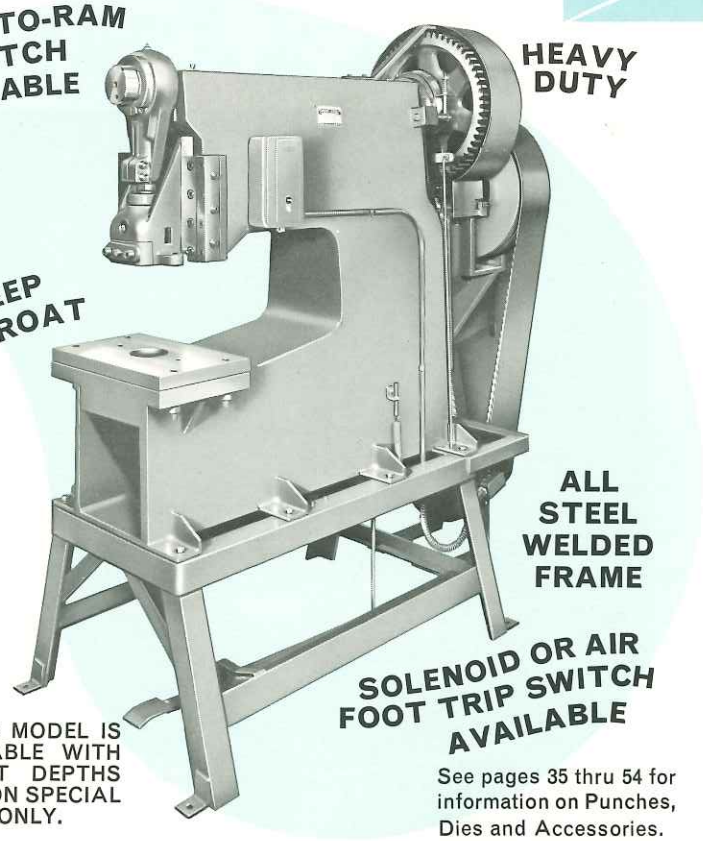
BE SURE AND INDICATE NUMBER OF PRESS GAUGE WORK TABLE WANTED FOR

ALL PRICES NET — F.O.B. FACTORY

SPECIFICATIONS	No. 230	No. 231
Capacity, Mild Steel	20 Tons	20 Tons
Depth of Throat	18"	24"
Height of Throat	9¾"	9¾"
Strokes per Minute	100	100
Length of Stroke	2"	2"
Adjustment of Ram	1¾"	1¾"
Die Space, Stroke Down, Adjustment Up	7"	7"
Diameter of Punch Shank Hole in Ram	1 9/16"	1 9/16"
Depth of Punch Shank Hole in Ram	2"	2"
Bolster Plate Dimensions	1"x12"x18"	1"x12"x18"
Slug Hole Clearance	4" Rd or 3½"x6"	4" Rd or 3½"x6"
Bolster Plate Holes — Center to Center	10½"	10½"
Diameter and Width of Flywheel	16" x 4¼"	16" x 4¼"
Weight of Flywheel	160 lbs.	160 lbs.
Motor	2 HP, 1800 RPM 60 CY, 3 PH, 220-440 V	2 HP, 1800 RPM 60 CY, 3 PH, 220-440 V
Clutch, Pin Type	Non-Repeat	Non-Repeat
Drive	3 V-Belts	3 V-Belts
Height Overall	66"	66"
Height, Floor to top of Bed	33-1/2"	33-1/2"
Floor Space Required	28" x 54"	28" x 62"
Weight	1700 lbs.	1860 lbs.
NET PRICES — F. O. B. FACTORY		
Deep Throat Power Press without Motor	$1,620.00	$1,920.00
Power Press with 2 or 3 PH, 220-440 V Motor	1,700.00	2,000.00
Power Press with 3 PH, 550 V Motor	1,700.00	2,000.00
Additional for Solenoid Foot Trip Switch	165.00	165.00
Additional for Air Foot Trip Switch	125.00	125.00
Additional for J. I. C. Control	250.00	250.00
Additional for Adjusto-Ram Clutch	330.00	330.00

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. 331 No. 336 CAPACITY 40 TONS

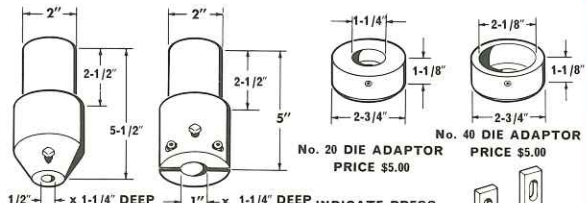


THE 336 MODEL IS AVAILABLE WITH THROAT DEPTHS TO 48" ON SPECIAL ORDER ONLY.

See pages 35 thru 54 for information on Punches, Dies and Accessories.

AUXILIARY ATTACHMENTS FOR No. 331 AND No. 336 POWER PUNCH PRESSES

NOT FURNISHED WITH PRESSES, MUST BE ORDERED EXTRA



P8 — 331 PUNCH HOLDER PRICE $13.50

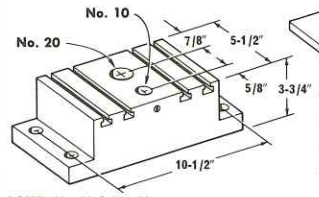
P28 — 331 PUNCH HOLDER PRICE $18.50

No. 20 DIE ADAPTOR PRICE $5.00

No. 40 DIE ADAPTOR PRICE $5.00

INDICATE PRESS NUMBER STRIPPER ARMS WANTED FOR

STRIPPER ARMS PRICE $22.50

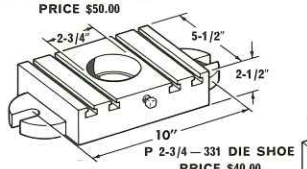


COMB. No. 10 & No. 20 331 OFFSET DIE SHOE PRICE $50.00

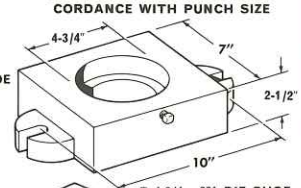
STRIPPER PLATES

SIZE	CAPACITY	PRICE
A4	Punch Size to 1/2"	$8.00
B4	Punch Size to 1"	10.00
C4	Punch Size to 2"	10.50
D4	Punch Size to 3"	11.00
E4	Punch Size to 4"	11.50

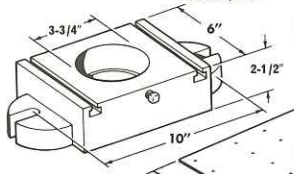
ORDER STRIPPER PLATES IN ACCORDANCE WITH PUNCH SIZE



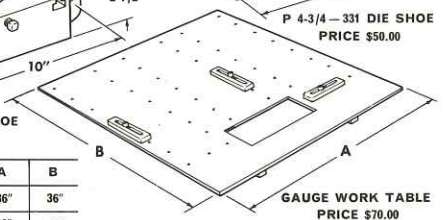
P 2-3/4 — 331 DIE SHOE PRICE $40.00



P 4-3/4 — 331 DIE SHOE PRICE $50.00



P 3-3/4 — 331 DIE SHOE PRICE $45.00

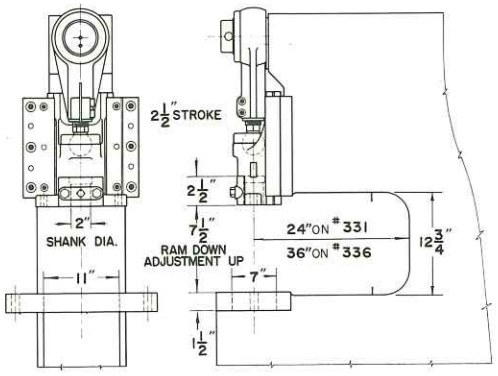


No.	A	B
331	36"	36"
336	36"	48"

GAUGE WORK TABLE PRICE $70.00

BE SURE AND INDICATE NUMBER OF PRESS GAUGE WORK TABLE WANTED FOR

ALL PRICES NET—F.O.B. FACTORY



SPECIFICATIONS	No. 331	No. 336
Capacity, Mild Steel	40 Tons	40 Tons
Depth of Throat	24"	36"
Height of Throat	12"	12"
Strokes per Minute	84	84
Length of Stroke	2½"	2½"
Adjustment of Ram	2½"	2½"
Die Space, Stroke Down, Adjustment Up	9"	9"
Diameter of Punch Shank Hole in Ram	2"	2"
Depth of Punch Shank Hole in Ram	2½"	2½"
Bolster Plate Dimensions	1½" x 12" x 20"	1½" x 12" x 20"
Slug Hole Clearance	8" Rd or 7" x 11"	8" Rd or 7" x 11"
Bolster Plate Holes — Center to Center	10½"	10½"
Diameter and Width of Flywheel	20" x 5¼"	20" x 5¼"
Weight of Flywheel	325 lbs.	325 lbs.
Motor	3 HP, 1800 RPM, 60 CY, 3 PH, 220-440 V	3 HP, 1800 RPM, 60 CY, 3 PH, 220-440 V
Clutch, Pin Type	Non-Repeat	Non-Repeat
Drive	3 V-Belts	3 V-Belts
Height Overall	78"	78"
Height, Floor to top of Bed	37-1/4"	37-1/2"
Floor Space Required	34" x 79"	34" x 96"
Weight	4063 lbs.	5625 lbs.
NET PRICES — F. O. B. FACTORY		
Heavy Duty Punch Press without Motor	$3,300.00	$4,600.00
Punch Press with 2 or 3 PH, 220-440 V Motor	3,400.00	4,700.00
Punch Press with 3 PH, 550 V Motor	3,400.00	4,700.00
Additional for Solenoid Foot Trip Switch	181.50	Standard*
Additional for Air Foot Trip Switch	125.00	Standard*
Additional for J. I. C. Control	250.00	250.00
Additional for Adjusto-Ram Clutch	385.00	385.00

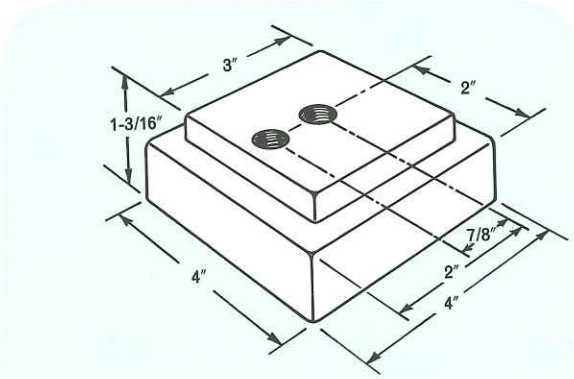
*Select one

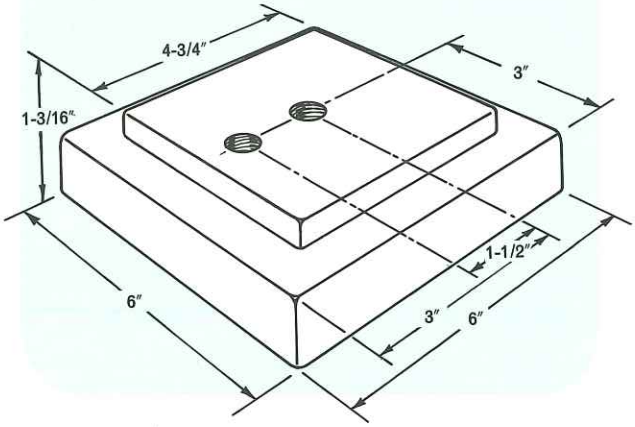
Machines purchased less motor will be equipped with the following: Switch (state phase desired), Belts, Motor Mounting, Guard, Sheave. Always state complete motor specifications desired.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

SPEEDS MACHINE INSTALLATION

No holes to drill in concrete floors. No lagging or shimming. Can be leveled and aligned in minutes without using special tools. Will not injure floor. Can be removed to other location at any time.

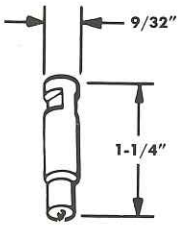




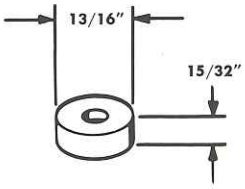
SIZE	GRADE COMPOUND	LOAD	PRICE PER SET OF 4
6" x 6"	60	0 to 4000 lbs.	$29.95
6" x 6"	80	4000 to 10,000 lbs.	29.95
4" x 4"	60	0 to 2000 lbs.	12.95
4" x 4"	80	2000 to 7500 lbs.	12.95

The following Round Punches and Dies are stocked for 14 ga. max.— Flat Top Dies Only.

If close concentricity punches and dies are required . . . add $1.00 to punch price and $1.00 to die price shown.



No. 5 PUNCH



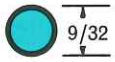
No. 10 DIE

The following Irregular Punches and Dies are stocked for 14 ga. max. Flat Top Dies Only.

If close concentricity punches and dies are required . . . add $3.00 to punch price and $3.00 to die price shown.

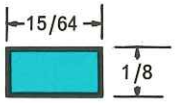
IF SIZE WANTED IS NOT SHOWN — USE NEXT LARGEST SIZE AND ADD 25% TO PRICE SHOWN

ROUNDS Maximum



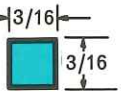
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/16	No. 5	$.50	No. 10	$.85	$1.35
5/64	No. 5	.50	No. 10	.85	1.35
3/32	No. 5	.50	No. 10	.85	1.35
7/64	No. 5	.50	No. 10	.85	1.35
1/8	No. 5	.50	No. 10	.85	1.35
9/64	No. 5	.50	No. 10	.85	1.35
5/32	No. 5	.50	No. 10	.85	1.35
11/64	No. 5	.50	No. 10	.85	1.35
3/16	No. 5	.50	No. 10	.85	1.35
13/64	No. 5	.50	No. 10	.85	1.35
7/32	No. 5	.50	No. 10	.85	1.35
15/64	No. 5	.50	No. 10	.85	1.35
1/4	No. 5	.50	No. 10	.85	1.35
17/64	No. 5	.50	No. 10	.85	1.35
9/32	No. 5	.50	No. 10	.85	1.35

TYPE N Maximum



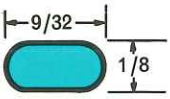
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 3/16	No. 5	$5.00	No. 10	$5.50	$10.50
1/8 x 7/32	No. 5	5.00	No. 10	5.50	10.50
1/8 x 15/64	No. 5	5.00	No. 10	5.50	10.50

TYPE R Maximum

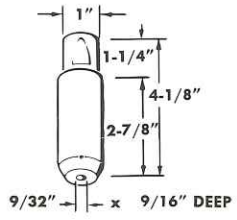


Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/8	No. 5	$5.00	No. 10	$5.50	$10.50
5/32 x 5/32	No. 5	5.00	No. 10	5.50	10.50
3/16 x 3/16	No. 5	5.00	No. 10	5.50	10.50

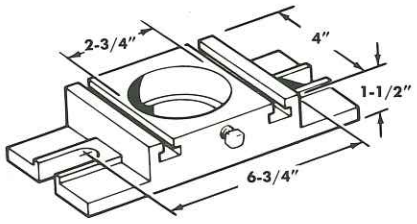
TYPE M Maximum



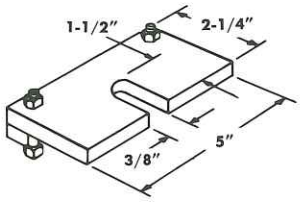
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/4	No. 5	$5.00	No. 10	$5.80	$10.80
1/8 x 9/32	No. 5	5.00	No. 10	5.80	10.80



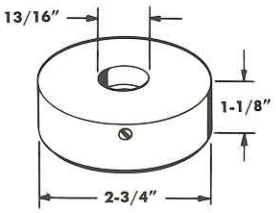
No. 5 PUNCH HOLDER PRICE $7.50



No. F 2¼ DIE SHOE PRICE $12.50



No. 5 STRIPPER PRICE $10.00

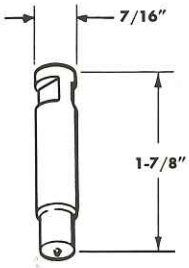


No. 10 DIE ADAPTOR PRICE $5.00

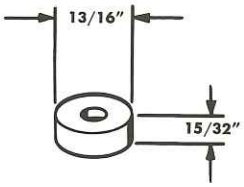
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

The following Round Punches and Dies are stocked for 14 ga. mild steel in Flat Top Dies. Crown Top Dies are stocked for 13 ga. thru 1/8″ mild steel.

If close concentricity punches and dies are required . . . add $1.00 to punch price and $1.00 to die prices shown.



No. 7 PUNCH



No. 10 DIE

The following Irregular Punches and Dies are stocked for 14 ga. — Flat Top Dies Only.

If close concentricity punches and dies are required . . . add $3.00 to punch price and $3.00 to die price shown.

IF SIZE WANTED IS NOT SHOWN — USE NEXT LARGEST SIZE AND ADD 25% TO PRICE SHOWN

ROUNDS Maximum 7/16

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/16	No. 7	$.85	No. 10	$.85	$1.70
5/64	No. 7	.85	No. 10	.85	1.70
3/32	No. 7	.85	No. 10	.85	1.70
7/64	No. 7	.85	No. 10	.85	1.70
1/8	No. 7	.85	No. 10	.85	1.70
9/64	No. 7	.85	No. 10	.85	1.70
5/32	No. 7	.85	No. 10	.85	1.70
11/64	No. 7	.85	No. 10	.85	1.70
3/16	No. 7	.85	No. 10	.85	1.70
13/64	No. 7	.85	No. 10	.85	1.70
7/32	No. 7	.85	No. 10	.85	1.70
15/64	No. 7	.85	No. 10	.85	1.70
1/4	No. 7	.85	No. 10	.85	1.70
17/64	No. 7	.85	No. 10	.85	1.70
9/32	No. 7	.85	No. 10	.85	1.70
19/64	No. 7	.85	No. 10	.85	1.70
5/16	No. 7	.85	No. 10	.85	1.70
21/64	No. 7	.85	No. 10	.85	1.70
11/32	No. 7	.85	No. 10	.85	1.70
23/64	No. 7	.85	No. 10	.85	1.70
3/8	No. 7	.85	No. 10	.85	1.70
25/64	No. 7	.85	No. 10	.85	1.70
13/32	No. 7	.85	No. 10	.85	1.70
27/64	No. 7	.85	No. 10	.85	1.70
7/16	No. 7	.85	No. 10	.85	1.70

TYPE N Maximum 3/8 × 1/8

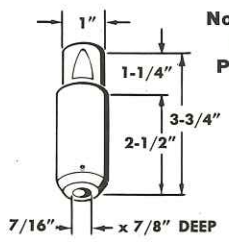
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 3/16	No. 7	$6.60	No. 10	$5.50	$12.10
1/8 x 7/32	No. 7	6.60	No. 10	5.50	12.10
1/8 x 1/4	No. 7	6.60	No. 10	5.50	12.10
1/8 x 9/32	No. 7	6.60	No. 10	5.50	12.10
1/8 x 5/16	No. 7	6.60	No. 10	5.50	12.10
1/8 x 11/32	No. 7	6.60	No. 10	5.50	12.10
1/8 x 3/8	No. 7	6.60	No. 10	5.50	12.10

TYPE R Maximum 1/4 × 1/4

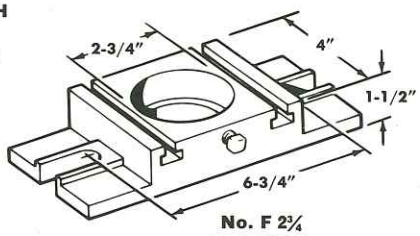
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/8	No. 7	$5.50	No. 10	$5.50	$11.00
3/16 x 3/16	No. 7	5.50	No. 10	5.50	11.00
1/4 x 1/4	No. 7	5.50	No. 10	5.50	11.00

TYPE M Maximum 7/16 × 1/8

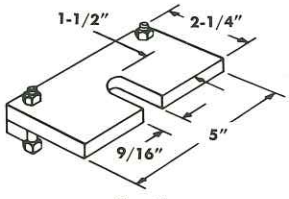
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 3/16	No. 7	$7.70	No. 10	$5.80	$13.50
1/8 x 1/4	No. 7	7.70	No. 10	5.80	13.50
1/8 x 5/16	No. 7	7.70	No. 10	5.80	13.50
1/8 x 3/8	No. 7	7.70	No. 10	5.80	13.50
1/8 x 7/16	No. 7	7.70	No. 10	5.80	13.50



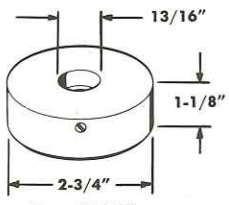
No. 7 PUNCH HOLDER PRICE $7.50



No. F 2¾ DIE SHOE PRICE $12.50



No. 7 STRIPPER PRICE $10.00

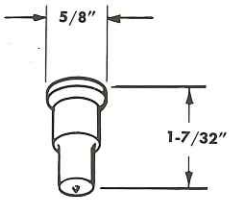


No. 10 DIE ADAPTOR PRICE $5.00

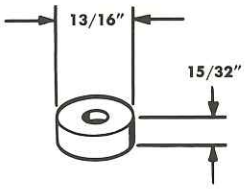
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

The following Round Punches and Dies are stocked for 14 ga. mild steel in Flat Top Dies. Crown Top Dies are stocked for 13 ga. thru 1/4" mild steel.

If close concentricity punches and dies are required . . . add $1.00 to punch price and $1.00 to die price shown.



No. 10 PUNCH



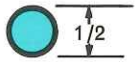
No. 10 DIE

The following Irregular Shaped Punches and Dies are stocked for 12 ga. mild steel.

If close concentricity punches and dies are required . . . add $3.00 to punch price and $3.00 to die price shown.

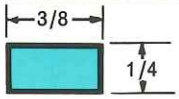
IF SIZE WANTED IS NOT SHOWN — USE NEXT LARGEST SIZE AND ADD 25% TO PRICE SHOWN

ROUNDS Maximum



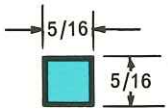
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
3/32	No. 10	$.85	No. 10	$.85	$1.70
7/64	No. 10	.85	No. 10	.85	1.70
1/8	No. 10	.85	No. 10	.85	1.70
9/64	No. 10	.85	No. 10	.85	1.70
5/32	No. 10	.85	No. 10	.85	1.70
11/64	No. 10	.85	No. 10	.85	1.70
3/16	No. 10	.85	No. 10	.85	1.70
13/64	No. 10	.85	No. 10	.85	1.70
7/32	No. 10	.85	No. 10	.85	1.70
15/64	No. 10	.85	No. 10	.85	1.70
1/4	No. 10	.85	No. 10	.85	1.70
17/64	No. 10	.85	No. 10	.85	1.70
9/32	No. 10	.85	No. 10	.85	1.70
19/64	No. 10	.85	No. 10	.85	1.70
5/16	No. 10	.85	No. 10	.85	1.70
21/64	No. 10	.85	No. 10	.85	1.70
11/32	No. 10	.85	No. 10	.85	1.70
23/64	No. 10	.85	No. 10	.85	1.70
3/8	No. 10	.85	No. 10	.85	1.70
25/64	No. 10	.85	No. 10	.85	1.70
13/32	No. 10	.85	No. 10	.85	1.70
27/64	No. 10	.85	No. 10	.85	1.70
7/16	No. 10	.85	No. 10	.85	1.70
29/64	No. 10	.85	No. 10	.85	1.70
15/32	No. 10	.85	No. 10	.85	1.70
31/64	No. 10	.85	No. 10	.85	1.70
1/2	No. 10	.85	No. 10	.85	1.70

TYPE N Maximum



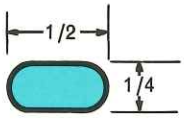
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 3/8	No. 10	$6.60	No. 10	$5.50	$12.10
3/16 x 3/8	No. 10	6.60	No. 10	5.50	12.10
1/4 x 3/8	No. 10	6.60	No. 10	5.50	12.10

TYPE R Maximum

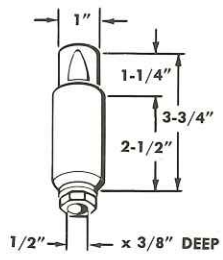


Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/8	No. 10	$5.50	No. 10	$5.50	$11.00
3/16 x 3/16	No. 10	5.50	No. 10	5.50	11.00
1/4 x 1/4	No. 10	5.50	No. 10	5.50	11.00
5/16 x 5/16	No. 10	5.50	No. 10	5.50	11.00

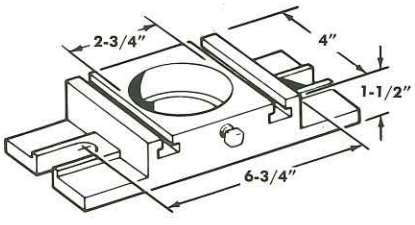
TYPE M Maximum



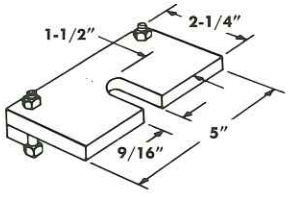
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/2	No. 10	$7.70	No. 10	$5.80	$13.50
3/16 x 1/2	No. 10	7.70	No. 10	5.80	13.50
1/4 x 1/2	No. 10	7.70	No. 10	5.80	13.50



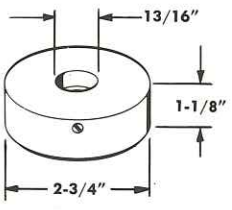
No. 10 PUNCH HOLDER
PRICE $8.50



No. F 2¾ DIE SHOE
PRICE $12.50



No. 10 STRIPPER
PRICE $10.00

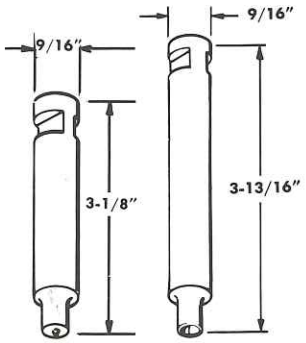


No. 10 DIE ADAPTOR
PRICE $5.00

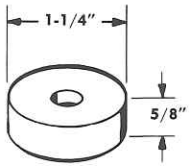
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

The following Round Punches and Dies are stocked for 14 ga. mild steel in Flat Top Dies. Crown Top Dies are stocked for 13 ga. thru 3/16″ mild steel.

If close concentricity punches and dies are required . . . add $1.00 to punch price and $1.00 to die price shown.



No. 16 PUNCH **No. 17 PUNCH**



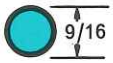
No. 20 DIE

The following Irregular Shaped Punches and Dies are stocked for 14 ga. mild steel. Dies for mild steel thinner or thicker than 14 ga. add 20% to price shown.

If close concentricity punches and dies are required . . . add $3.00 to punch price and $3.00 to die price shown.

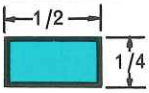
IF SIZE WANTED IS NOT SHOWN — USE NEXT LARGEST SIZE AND ADD 25% TO PRICE SHOWN

ROUNDS Maximum



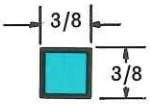
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8	No. 16 or 17	$1.40	No. 20	$1.40	$2.80
9/64	No. 16 or 17	1.40	No. 20	1.40	2.80
5/32	No. 16 or 17	1.40	No. 20	1.40	2.80
11/64	No. 16 or 17	1.40	No. 20	1.40	2.80
3/16	No. 16 or 17	1.40	No. 20	1.40	2.80
13/64	No. 16 or 17	1.40	No. 20	1.40	2.80
7/32	No. 16 or 17	1.40	No. 20	1.40	2.80
15/64	No. 16 or 17	1.40	No. 20	1.40	2.80
1/4	No. 16 or 17	1.40	No. 20	1.40	2.80
17/64	No. 16 or 17	1.40	No. 20	1.40	2.80
9/32	No. 16 or 17	1.40	No. 20	1.40	2.80
19/64	No. 16 or 17	1.40	No. 20	1.40	2.80
5/16	No. 16 or 17	1.40	No. 20	1.40	2.80
21/64	No. 16 or 17	1.40	No. 20	1.40	2.80
11/32	No. 16 or 17	1.40	No. 20	1.40	2.80
23/64	No. 16 or 17	1.40	No. 20	1.40	2.80
3/8	No. 16 or 17	1.40	No. 20	1.40	2.80
25/64	No. 16 or 17	1.40	No. 20	1.40	2.80
13/32	No. 16 or 17	1.40	No. 20	1.40	2.80
27/64	No. 16 or 17	1.40	No. 20	1.40	2.80
7/16	No. 16 or 17	1.40	No. 20	1.40	2.80
29/64	No. 16 or 17	1.40	No. 20	1.40	2.80
15/32	No. 16 or 17	1.40	No. 20	1.40	2.80
31/64	No. 16 or 17	1.40	No. 20	1.40	2.80
1/2	No. 16 or 17	1.40	No. 20	1.40	2.80
33/64	No. 16 or 17	1.40	No. 20	1.40	2.80
17/32	No. 16 or 17	1.40	No. 20	1.40	2.80
35/64	No. 16 or 17	1.40	No. 20	1.40	2.80
9/16	No. 16 or 17	1.40	No. 20	1.40	2.80

TYPE N Maximum



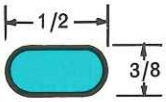
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/2	No. 16 or 17	$6.60	No. 20	$9.35	$15.95
3/16 x 1/2	No. 16 or 17	6.60	No. 20	9.35	15.95
1/4 x 1/2	No. 16 or 17	6.60	No. 20	9.35	15.95

TYPE R Maximum

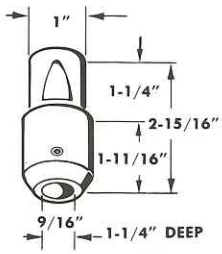


Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/8	No. 16 or 17	$5.50	No. 20	$9.35	$14.85
3/16 x 3/16	No. 16 or 17	5.50	No. 20	9.35	14.85
1/4 x 1/4	No. 16 or 17	5.50	No. 20	9.35	14.85
5/16 x 5/16	No. 16 or 17	5.50	No. 20	9.35	14.85
3/8 x 3/8	No. 16 or 17	5.50	No. 20	9.35	14.85

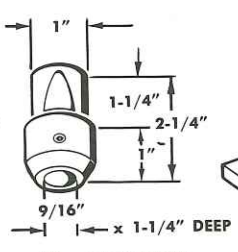
TYPE M Maximum



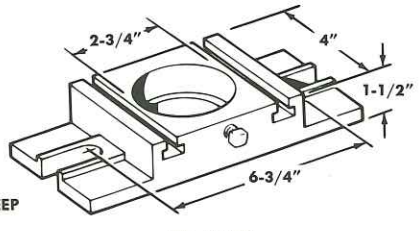
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/2	No. 16 or 17	$7.70	No. 20	$11.50	$19.20
3/16 x 1/2	No. 16 or 17	7.70	No. 20	11.50	19.20
1/4 x 1/2	No. 16 or 17	7.70	No. 20	11.50	19.20
5/16 x 1/2	No. 16 or 17	7.70	No. 20	11.50	19.20
3/8 x 1/2	No. 16 or 17	7.70	No. 20	11.50	19.20



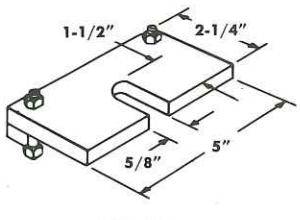
No. 16 PUNCH HOLDER PRICE $7.50



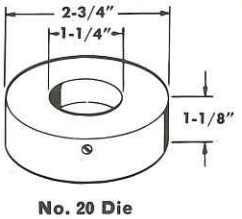
No. 17 PUNCH HOLDER PRICE $7.50



No. F 2¼ DIE SHOE PRICE $12.50



No. 17 STRIPPER PRICE $10.00

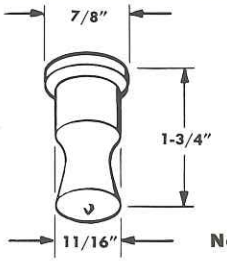


No. 20 Die ADAPTOR PRICE $5.00

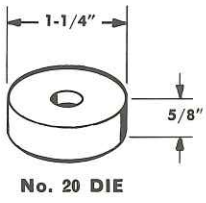
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

The following Round Punches and Dies are stocked for 14 ga. mild steel in Flat Top Dies. Crown Top Dies are stocked for 13 ga. thru 1/2" mild steel.

If close concentricity punches and dies are required . . . add $1.00 to punch price and $1.00 to die price shown.



No. 20 PUNCH



No. 20 DIE

The following Irregular Shaped Punches and Dies are stocked for 3/16" mild steel. Dies for mild steel thicker up thru 1/2" add 20% to price shown.

If close concentricity punches and dies are required . . . add $3.00 to punch price and $3.00 to die price shown.

IF SIZE WANTED IS NOT SHOWN — USE NEXT LARGEST SIZE AND ADD 25% TO PRICE SHOWN

ROUNDS Maximum 11/16

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8	No. 20	$1.40	No. 20	$1.40	$2.80
9/64	No. 20	1.40	No. 20	1.40	2.80
5/32	No. 20	1.40	No. 20	1.40	2.80
11/64	No. 20	1.40	No. 20	1.40	2.80
3/16	No. 20	1.40	No. 20	1.40	2.80
13/64	No. 20	1.40	No. 20	1.40	2.80
7/32	No. 20	1.40	No. 20	1.40	2.80
15/64	No. 20	1.40	No. 20	1.40	2.80
1/4	No. 20	1.40	No. 20	1.40	2.80
17/64	No. 20	1.40	No. 20	1.40	2.80
9/32	No. 20	1.40	No. 20	1.40	2.80
19/64	No. 20	1.40	No. 20	1.40	2.80
5/16	No. 20	1.40	No. 20	1.40	2.80
21/64	No. 20	1.40	No. 20	1.40	2.80
11/32	No. 20	1.40	No. 20	1.40	2.80
23/64	No. 20	1.40	No. 20	1.40	2.80
3/8	No. 20	1.40	No. 20	1.40	2.80
25/64	No. 20	1.40	No. 20	1.40	2.80
13/32	No. 20	1.40	No. 20	1.40	2.80
27/64	No. 20	1.40	No. 20	1.40	2.80
7/16	No. 20	1.40	No. 20	1.40	2.80
29/64	No. 20	1.40	No. 20	1.40	2.80
15/32	No. 20	1.40	No. 20	1.40	2.80
31/64	No. 20	1.40	No. 20	1.40	2.80
1/2	No. 20	1.40	No. 20	1.40	2.80
33/64	No. 20	1.40	No. 20	1.40	2.80
17/32	No. 20	1.40	No. 20	1.40	2.80
35/64	No. 20	1.40	No. 20	1.40	2.80
9/16	No. 20	1.40	No. 20	1.40	2.80
37/64	No. 20	1.40	No. 20	1.40	2.80
19/32	No. 20	1.40	No. 20	1.40	2.80
39/64	No. 20	1.40	No. 20	1.40	2.80
5/8	No. 20	1.40	No. 20	1.40	2.80
41/64	No. 20	1.40	No. 20	1.40	2.80
21/32	No. 20	1.40	No. 20	1.40	2.80
43/64	No. 20	1.40	No. 20	1.40	2.80
11/16	No. 20	1.40	No. 20	1.40	2.80

TYPE N Maximum 1/2 × 3/8

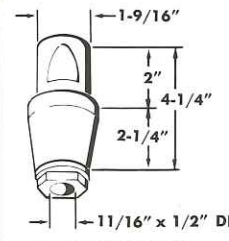
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/2	No. 20	$9.35	No. 20	$11.25	$20.60
3/16 x 1/2	No. 20	9.35	No. 20	11.25	20.60
1/4 x 1/2	No. 20	9.35	No. 20	11.25	20.60
5/16 x 1/2	No. 20	9.35	No. 20	11.25	20.60
3/8 x 1/2	No. 20	9.35	No. 20	11.25	20.60

TYPE R Maximum 15/32 × 15/32

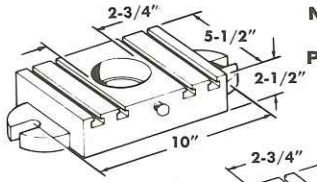
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/8	No. 20	$9.35	No. 20	$11.25	$20.60
3/16 x 3/16	No. 20	9.35	No. 20	11.25	20.60
1/4 x 1/4	No. 20	9.35	No. 20	11.25	20.60
5/16 x 5/16	No. 20	9.35	No. 20	11.25	20.60
3/8 x 3/8	No. 20	9.35	No. 20	11.25	20.60
7/16 x 7/16	No. 20	9.35	No. 20	11.25	20.60
15/32 x 15/32	No. 20	9.35	No. 20	11.25	20.60

TYPE M Maximum 1/2 × 7/16

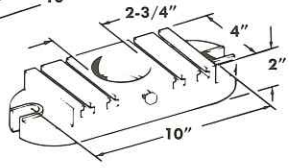
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/2	No. 20	$11.50	No. 20	$13.80	$25.30
3/16 x 1/2	No. 20	11.50	No. 20	13.80	25.30
1/4 x 1/2	No. 20	11.50	No. 20	13.80	25.30
5/16 x 1/2	No. 20	11.50	No. 20	13.80	25.30
3/8 x 1/2	No. 20	11.50	No. 20	13.80	25.30
7/16 x 1/2	No. 20	11.50	No. 20	13.80	25.30



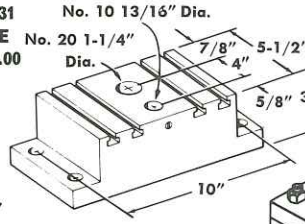
No. P 20 PUNCH HOLDER PRICE $10.00

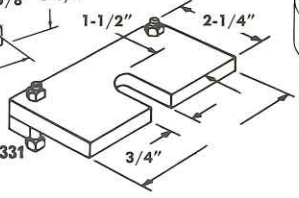


No. P 2¾-331 DIE SHOE PRICE $40.00



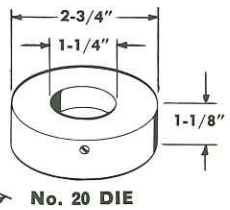
No. P 2¾ DIE SHOE PRICE $16.50





COMB. No. 10 & No. 20-331 OFFSET DIE SHOE PRICE $50.00

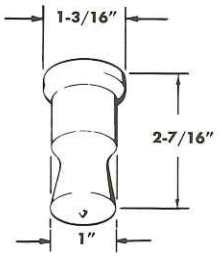
No. 20 STRIPPER PRICE $10.00



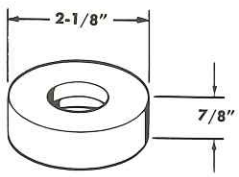
No. 20 DIE ADAPTOR PRICE $5.00

The following Round Punches and Dies are stocked for 14 ga. mild steel in Flat Top Dies. Crown Top Dies are stocked for 13 ga. thru 5/8" mild steel.

If close concentricity punches and dies are required . . . add $1.00 to punch price and $1.00 to die price shown.



No. 40 PUNCH



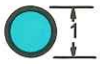
No. 40 DIE

The following Irregular Shaped Punches and Dies are stocked for 1/4" mild steel. Dies for mild steel thicker up thru 5/8" add 20% to price shown.

If close concentricity punches and dies are required . . . add $3.00 to punch price and $3.00 to die price shown.

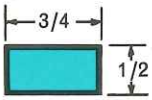
IF SIZE WANTED IS NOT SHOWN — USE NEXT LARGEST SIZE AND ADD 25% TO PRICE SHOWN

ROUNDS Maximum



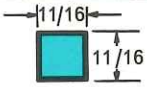
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8	No. 40	$3.30	No. 40	$4.40	$7.70
5/32	No. 40	3.30	No. 40	4.40	7.70
3/16	No. 40	3.30	No. 40	4.40	7.70
7/32	No. 40	3.30	No. 40	4.40	7.70
1/4	No. 40	3.30	No. 40	4.40	7.70
9/32	No. 40	3.30	No. 40	4.40	7.70
5/16	No. 40	3.30	No. 40	4.40	7.70
11/32	No. 40	3.30	No. 40	4.40	7.70
3/8	No. 40	3.30	No. 40	4.40	7.70
13/32	No. 40	3.30	No. 40	4.40	7.70
7/16	No. 40	3.30	No. 40	4.40	7.70
15/32	No. 40	3.30	No. 40	4.40	7.70
1/2	No. 40	3.30	No. 40	4.40	7.70
17/32	No. 40	3.30	No. 40	4.40	7.70
9/16	No. 40	3.30	No. 40	4.40	7.70
19/32	No. 40	3.30	No. 40	4.40	7.70
5/8	No. 40	3.30	No. 40	4.40	7.70
21/32	No. 40	3.30	No. 40	4.40	7.70
11/16	No. 40	3.30	No. 40	4.40	7.70
23/32	No. 40	3.30	No. 40	4.40	7.70
3/4	No. 40	3.30	No. 40	4.40	7.70
25/32	No. 40	3.30	No. 40	4.40	7.70
13/16	No. 40	3.30	No. 40	4.40	7.70
27/32	No. 40	3.30	No. 40	4.40	7.70
7/8	No. 40	3.30	No. 40	4.40	7.70
29/32	No. 40	3.30	No. 40	4.40	7.70
15/16	No. 40	3.30	No. 40	4.40	7.70
31/32	No. 40	3.30	No. 40	4.40	7.70
1	No. 40	3.30	No. 40	4.40	7.70

TYPE N Maximum



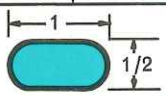
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 3/4	No. 40	$10.50	No. 40	$15.85	$26.35
3/16 x 3/4	No. 40	10.50	No. 40	15.85	26.35
1/4 x 3/4	No. 40	10.50	No. 40	15.85	26.35
5/16 x 3/4	No. 40	10.50	No. 40	15.85	26.35
3/8 x 3/4	No. 40	10.50	No. 40	15.85	26.35
7/16 x 3/4	No. 40	10.50	No. 40	15.85	26.35
1/2 x 3/4	No. 40	10.50	No. 40	15.85	26.35

TYPE R Maximum

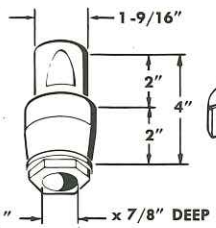


Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1/8	No. 40	$10.50	No. 40	$15.85	$26.35
3/16 x 3/16	No. 40	10.50	No. 40	15.85	26.35
1/4 x 1/4	No. 40	10.50	No. 40	15.85	26.35
5/16 x 5/16	No. 40	10.50	No. 40	15.85	26.35
3/8 x 3/8	No. 40	10.50	No. 40	15.85	26.35
7/16 x 7/16	No. 40	10.50	No. 40	15.85	26.35
1/2 x 1/2	No. 40	10.50	No. 40	15.85	26.35
9/16 x 9/16	No. 40	10.50	No. 40	15.85	26.35
5/8 x 5/8	No. 40	10.50	No. 40	15.85	26.35
11/16 x 11/16	No. 40	10.50	No. 40	15.85	26.35

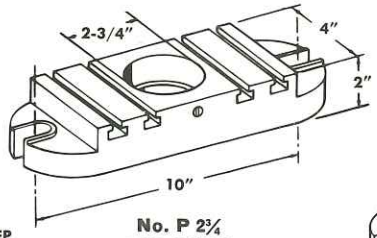
TYPE M Maximum



Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8 x 1	No. 40	$12.00	No. 40	$17.85	$29.85
3/16 x 1	No. 40	12.00	No. 40	17.85	29.85
1/4 x 1	No. 40	12.00	No. 40	17.85	29.85
5/16 x 1	No. 40	12.00	No. 40	17.85	29.85
3/8 x 1	No. 40	12.00	No. 40	17.85	29.85
7/16 x 1	No. 40	12.00	No. 40	17.85	29.85
1/2 x 1	No. 40	12.00	No. 40	17.85	29.85

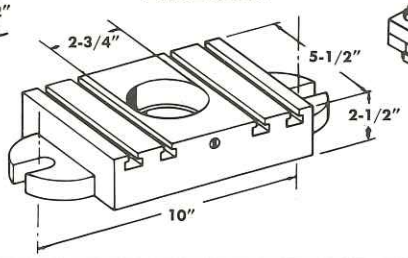


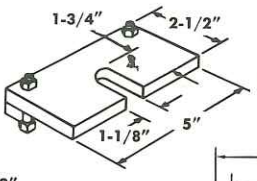
No. P 40 PUNCH HOLDER PRICE $11.00



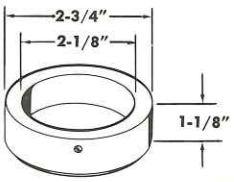
No. P 2¾ DIE SHOE PRICE $16.50

No. P 2¾-331 DIE SHOE PRICE $40.00





No. 40 STRIPPER PRICE $10.00



No. 40 DIE ADAPTOR PRICE $5.00

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

DEEP THROAT PRESSES Nos. 15, 027, 32, 33, 34, 118, 811
FOOT PRESSES Nos. 29, 58, 68
POWER PRESSES Nos. 127, 129, 130, 150, 230, 231, 331, 336

IMPORTANT

When ordering or requesting a quotation for Punches and Dies, be sure to include the following information:

Type and thickness of material, so proper clearance can be incorporated. Make and model number of the machine on which the Punches and Dies will be used.

Punches and Dies as shown on the following pages are stocked for 14 gauge or lighter mild steel. For material thicker than 14 gauge mild steel add 20% to the price of the die.

If Punches are required with punch point concentric with the punch shank, add $1.00 to the Round Punches, $3.00 to the Irregular Shaped Punches.

If Dies are required with hole concentric with the O.D. of the Dies, add $1.00 to the price of the Round Dies, $3.00 to the Irregular Shaped Dies.

PUNCHING RULES

1. The thickness of the metal to be punched must not exceed the diameter of the punch.

2. If it is desirable to retain and use the punched blank, the punch face must be flat.

3. As a lubricant when perforating mild steel, we suggest sulphurized oil or lard oil. When perforating brass, we suggest paraffin base oils. When perforating stainless steel, we suggest sulphurized oil diluted with paraffin.

If size wanted is not shown, use price of next largest size and add 25%.

ROUNDS

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/16″	No. 8	$1.10	No. 20	$1.40	$2.50
5/64″	No. 8	1.10	No. 20	1.40	2.50
3/32″	No. 8	1.10	No. 20	1.40	2.50
7/64″	No. 8	1.10	No. 20	1.40	2.50
1/8″	No. 8	1.10	No. 20	1.40	2.50
9/64″	No. 8	1.10	No. 20	1.40	2.50
5/32″	No. 8	1.10	No. 20	1.40	2.50
11/64″	No. 8	1.10	No. 20	1.40	2.50
3/16″	No. 8	1.10	No. 20	1.40	2.50
13/64″	No. 8	1.10	No. 20	1.40	2.50
7/32″	No. 8	1.10	No. 20	1.40	2.50
15/64″	No. 8	1.10	No. 20	1.40	2.50
1/4″	No. 8	1.10	No. 20	1.40	2.50
17/64″	No. 8	1.10	No. 20	1.40	2.50
9/32″	No. 8	1.10	No. 20	1.40	2.50
19/64″	No. 8	1.10	No. 20	1.40	2.50
5/16″	No. 8	1.10	No. 20	1.40	2.50
21/64″	No. 8	1.10	No. 20	1.40	2.50
11/32″	No. 8	1.10	No. 20	1.40	2.50
23/64″	No. 8	1.10	No. 20	1.40	2.50
3/8″	No. 8	1.10	No. 20	1.40	2.50
25/64″	No. 8	1.10	No. 20	1.40	2.50
13/32″	No. 8	1.10	No. 20	1.40	2.50
27/64″	No. 8	1.10	No. 20	1.40	2.50
7/16″	No. 8	1.10	No. 20	1.40	2.50
27/64″	No. 8	1.10	No. 20	1.40	2.50
15/32″	No. 8	1.10	No. 20	1.40	2.50
31/64″	No. 8	1.10	No. 20	1.40	2.50
1/2″	No. 8	1.10	No. 20	1.40	2.50
33/64″	No. 28	2.75	No. 20	1.40	4.15
17/32″	No. 28	2.75	No. 20	1.40	4.15
35/64″	No. 28	2.75	No. 20	1.40	4.15
9/16″	No. 28	2.75	No. 20	1.40	4.15

ROUNDS

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
37/64″	No. 28	$2.75	No. 20	$1.40	$4.15
19/32″	No. 28	2.75	No. 20	1.40	4.15
39/64″	No. 28	2.75	No. 20	1.40	4.15
5/8″	No. 28	2.75	No. 20	1.40	4.15
41/64″	No. 28	3.30	No. 20	1.40	4.70
21/32″	No. 28	3.30	No. 20	1.40	4.70
43/64″	No. 28	3.30	No. 20	1.40	4.70
11/16″	No. 28	3.30	No. 20	1.40	4.70
45/64″	No. 28	3.30	No. 20	1.40	4.70
23/32″	No. 28	3.30	No. 20	1.40	4.70
47/64″	No. 28	3.30	No. 20	1.40	4.70
3/4″	No. 28	3.30	No. 20	2.20	5.50
49/64″	No. 28	3.30	No. 20	2.20	5.50
25/32″	No. 28	3.30	No. 20	2.20	5.50
51/64″	No. 28	3.30	No. 20	2.20	5.50
13/16″	No. 28	3.30	No. 20	2.20	5.50
53/64″	No. 28	3.30	No. 40	4.40	7.70
27/32″	No. 28	3.30	No. 40	4.40	7.70
55/64″	No. 28	3.30	No. 40	4.40	7.70
7/8″	No. 28	3.30	No. 40	4.40	7.70
57/64″	No. 28	3.30	No. 40	4.40	7.70
29/32″	No. 28	3.30	No. 40	4.40	7.70
59/64″	No. 28	3.30	No. 40	4.40	7.70
15/16″	No. 28	3.30	No. 40	4.40	7.70
61/64″	No. 28	3.30	No. 40	4.40	7.70
31/32″	No. 28	3.30	No. 40	4.40	7.70
63/64″	No. 28	3.30	No. 40	4.40	7.70
1″	No. 28	3.85	No. 40	4.40	8.25
1-1/64″	No. 28	3.85	No. 40	4.40	8.25
1-1/32″	No. 28	3.85	No. 40	4.40	8.25
1-3/64″	No. 28	3.85	No. 40	4.40	8.25
1-1/16″	No. 28	3.85	No. 40	4.40	8.25

ROUNDS

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1-5/64″	No. 28	$3.85	No. 40	$4.40	$8.25
1-3/32″	No. 28	3.85	No. 40	4.40	8.25
1-7/64″	No. 28	3.85	No. 40	4.40	8.25
1-1/8″	No. 28	3.85	No. 40	4.40	8.25
1-9/64″	No. 28	3.85	No. 40	4.40	8.25
1-5/32″	No. 28	3.85	No. 40	4.40	8.25
1-11/64″	No. 28	3.85	No. 40	4.40	8.25
1-3/16″	No. 28	3.85	No. 40	4.40	8.25
1-13/64″	No. 28	3.85	No. 40	4.40	8.25
1-7/32″	No. 28	3.85	No. 40	4.40	8.25
1-15/64″	No. 28	3.85	No. 40	4.40	8.25
1-1/4″	No. 28	5.50	No. 40	4.40	9.90
1-17/64″	No. 28	5.50	No. 40	4.40	9.90
1-9/32″	No. 28	5.50	No. 40	4.40	9.90
1-19/64″	No. 28	5.50	No. 40	4.40	9.90
1-5/16″	No. 28	5.50	No. 40	4.40	9.90
1-21/64″	No. 28	5.50	No. 40	4.40	9.90
1-11/32″	No. 28	5.50	No. 40	4.40	9.90
1-23/64″	No. 28	5.50	No. 40	4.40	9.90
1-3/8″	No. 28	5.50	No. 40	4.40	9.90
1-25/64″	No. 28	5.50	No. 40	4.40	9.90
1-13/32″	No. 28	5.50	No. 40	4.40	9.90
1-27/64″	No. 28	5.50	No. 40	4.40	9.90
1-7/16″	No. 28	5.50	No. 40	4.40	9.90
1-29/64″	No. 28	5.50	No. 40	4.40	9.90
1-15/32″	No. 28	5.50	No. 28—2-3/4	4.95	10.45
1-31/64″	No. 28	5.50	No. 28—2-3/4	4.95	10.45
1-1/2″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-33/64″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-17/32″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-35/64″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-9/16″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-37/64″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-19/32″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-39/64″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-5/8″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-41/64″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-21/32″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-43/64″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-11/16″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-45/64″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-23/32″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-47/64″	No. 28	6.60	No. 28—2-3/4	4.95	11.55
1-3/4″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-49/64″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-25/32″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-51/64″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-13/16″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-53/64″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-27/32″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-55/64″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-7/8″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-57/64″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-29/64″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-59/64″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-15/16″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-61/64″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-31/32″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
1-63/64″	No. 28	7.15	No. 28—2-3/4	4.95	12.10
2″	No. 28	8.80	No. 28—2-3/4	4.95	13.75

ROUNDS

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
2-1/16″	No. 28	$8.80	No. 28—3-3/4	$ 9.35	$18.15
2-1/8″	No. 28	8.80	No. 28—3-3/4	9.35	18.15
2-3/16″	No. 28	8.80	No. 28—3-3/4	9.35	18.15
2-1/4″	No. 28	9.35	No. 28—3-3/4	9.35	18.70
2-5/16″	No. 28	9.35	No. 28—3-3/4	9.35	18.70
2-3/8″	No. 28	9.35	No. 28—3-3/4	9.35	18.70
2-7/16″	No. 28	9.35	No. 28—3-3/4	9.35	18.70
2-1/2″	No. 28	9.90	No. 28—3-3/4	9.35	19.25
2-9/16″	No. 28	9.90	No. 28—3-3/4	9.35	19.25
2-5/8″	No. 28	9.90	No. 28—3-3/4	9.35	19.25
2-11/16″	No. 28	9.90	No. 28—3-3/4	9.35	19.25
2-3/4″	No. 28	10.45	No. 28—3-3/4	9.35	19.80
2-13/16″	No. 28	10.45	No. 28—3-3/4	9.35	19.80
2-7/8″	No. 28	10.45	No. 28—3-3/4	9.35	19.80
2-15/16″	No. 28	10.45	No. 28—3-3/4	9.35	19.80
3″	No. 28	11.00	No. 28—3-3/4	9.35	20.35
3-1/16″	No. 28	11.00	No. 28—4-3/4	14.85	25.85
3-1/8″	No. 28	11.00	No. 28—4-3/4	14.85	25.85
3-3/16″	No. 28	11.00	No. 28—4-3/4	14.85	25.85
3-1/4″	No. 28	11.55	No. 28—4-3/4	14.85	26.40
3-5/16″	No. 28	11.55	No. 28—4-3/4	14.85	26.40
3-3/8″	No. 28	11.55	No. 28—4-3/4	14.85	26.40
3-7/16″	No. 28	11.55	No. 28—4-3/4	14.85	26.40
3-1/2″	No. 28	12.10	No. 28—4-3/4	14.85	26.95
3-9/16″	No. 28	12.10	No. 28—4-3/4	14.85	26.95
3-5/8″	No. 28	12.10	No. 28—4-3/4	14.85	26.95
3-11/16″	No. 28	12.10	No. 28—4-3/4	14.85	26.95
3-3/4″	No. 28	12.65	No. 28—4-3/4	14.85	27.50
3-13/16″	No. 28	12.65	No. 28—4-3/4	14.85	27.50
3-7/8″	No. 28	12.65	No. 28—4-3/4	14.85	27.50
3-15/16″	No. 28	12.65	No. 28—4-3/4	14.85	27.50
4″	No. 28	14.85	No. 28—4-3/4	14.85	29.70
4-1/16″	No. 28—1-9/16	55.00	No. 28—5-3/4	38.50	93.50
	No. 28—2	66.00	No. 28—5-3/4	38.50	104.50
4-1/8″	No. 28—1-9/16	55.00	No. 28—5-3/4	38.50	93.50
	No. 28—2	66.00	No. 28—5-3/4	38.50	104.50
4-3/16″	No. 28—1-9/16	55.00	No. 28—5-3/4	38.50	93.50
	No. 28—2	66.00	No. 28—5-3/4	38.50	104.50
4-1/4″	No. 28—1-9/16	60.50	No. 28—5-3/4	38.50	99.00
	No. 28—2	71.50	No. 28—5-3/4	38.50	110.00
4-5/16″	No. 28—1-9/16	60.50	No. 28—5-3/4	41.25	101.75
	No. 28—2	71.50	No. 28—5-3/4	41.25	112.75
4-3/8″	No. 28—1-9/16	60.50	No. 28—5-3/4	41.25	101.75
	No. 28—2	71.50	No. 28—5-3/4	41.25	112.25
4-7/16″	No. 28—1-9/16	60.50	No. 28—5-3/4	41.25	101.75
	No. 28—2	71.50	No. 28—5-3/4	41.25	112.75
4-1/2″	No. 28—1-9/16	66.00	No. 28—5-3/4	41.25	107.25
	No. 28—2	77.00	No. 28—5-3/4	41.25	118.25
4-9/16″	No. 28—1-9/16	66.00	No. 28—5-3/4	44.00	110.00
	No. 28—2	77.00	No. 28—5-3/4	44.00	121.00
4-5/8″	No. 28—1-9/16	66.00	No. 28—5-3/4	44.00	110.00
	No. 28—2	77.00	No. 28—5-3/4	44.00	121.00
4-11/16″	No. 28—1-9/16	66.00	No. 28—5-3/4	44.00	110.00
	No. 28—2	77.00	No. 28—5-3/4	44.00	121.00
4-3/4″	No. 28—1-9/16	71.50	No. 28—5-3/4	44.00	115.50
	No. 28—2	82.50	No. 28—5-3/4	44.00	126.50
4-13/16″	No. 28—1-9/16	71.50	No. 28—6-3/4	46.75	118.25
	No. 28—2	82.50	No. 28—6-3/4	46.75	129.25
4-7/8″	No. 28—1-9/16	71.50	No. 28—6-3/4	46.75	118.25
	No. 28—2	82.50	No. 28—6-3/4	46.75	129.25

ROUNDS

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
4-15/16″	No. 28—1-9/16	$71.50	No. 28—6-3/4	$46.75	$118.25
	No. 28—2	82.50	No. 28—6-3/4	46.75	129.25
5″	No. 28—1-9/16	77.00	No. 28—6-3/4	46.75	123.75
	No. 28—2	88.00	No. 28—6-3/4	46.75	134.75
5-1/8″	No. 28—1-9/16	77.00	No. 28—6-3/4	49.50	126.50
	No. 28—2	88.00	No. 28—6-3/4	49.50	137.50
5-1/4″	No. 28—1-9/16	82.50	No. 28—6-3/4	49.50	132.00
	No. 28—2	93.50	No. 28—6-3/4	49.50	143.00
5-3/8″	No. 28—1-9/16	82.50	No. 28—6-3/4	52.25	134.75
	No. 28—2	93.50	No. 28—6-3/4	52.25	145.75
5-1/2″	No. 28—1-9/16	88.00	No. 28—6-3/4	52.25	140.25
	No. 28—2	99.00	No. 28—6-3/4	52.25	151.25
5-5/8″	No. 28—1-9/16	88.00	No. 28—6-3/4	55.00	143.00
	No. 28—2	99.00	No. 28—6-3/4	55.00	154.00
5-3/4″	No. 28—1-9/16	93.50	No. 28—6-3/4	55.00	148.50
	No. 28—2	104.50	No. 28—6-3/4	55.00	159.50
5-7/8″	No. 28—1-9/16	93.50		121.00	214.50
	No. 28—2	104.50		121.00	225.50
6″	No. 28—1-9/16	98.50		121.00	219.50
	No. 28—2	111.25		121.00	232.25

The following are available but not stocked

6-1/8″	No. 28—1-9/16	98.50	DIE AND DIE SHOE UNITS STATE PRESS TO BE USED WITH	133.50	232.00
	No. 28—2	111.25		133.50	244.75
6-1/4″	No. 28—1-9/16	103.50		133.50	237.00
	No. 28—2	118.00		133.50	251.50
6-3/8″	No. 28—1-9/16	103.50		133.50	237.00
	No. 28—2	118.00		133.50	251.50
6-1/2″	No. 28—1-9/16	108.50		133.50	242.00
	No. 28—2	124.75		133.50	258.25
6-5/8″	No. 28—1-9/16	108.50		145.75	254.25
	No. 28—2	124.75		145.75	270.50
6-3/4″	No. 28—1-9/16	113.50		145.75	259.25
	No. 28—2	131.25		145.75	277.00
6-7/8″	No. 28—1-9/16	113.50		145.75	259.25
	No. 28—2	131.25		145.75	277.00
7″	No. 28—1-9/16	117.25		145.75	263.00
	No. 28—2	138.00		145.75	283.75
7-1/8″	No. 28—1-9/16	117.25		158.25	275.50
	No. 28—2	138.00		158.25	296.25
7-1/4″	No. 28—1-9/16	123.25		158.25	281.50
	No. 28—2	144.75		158.25	303.00
7-3/8″	No. 28—1-9/16	123.25		158.25	281.50
	No. 28—2	144.75		158.25	303.00
7-1/2″	No. 28—1-9/16	128.25		158.25	286.50
	No. 28—2	151.50		158.25	309.75
7-5/8″	No. 28—1-9/16	128.25		170.50	298.75
	No. 28—2	151.50		170.50	322.00
7-3/4″	No. 28—1-9/16	133.00		170.50	303.50
	No. 28—2	158.25		170.50	328.75
7-7/8″	No. 28—1-9/16	133.00		170.50	303.50
	No. 28—2	158.25		170.50	328.75
8″	No. 28—1-9/16	137.50		170.50	308.00
	No. 28—2	165.00		170.50	335.50

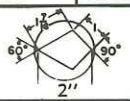
ROUNDS—DRILL SIZE

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
A thru 60	No. 8	$1.40	No.20	$1.65	$3.05

TYPE R

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8″ x 1/8″	No. 8	$5.00	No. 20	$8.50	$13.50
5/32″ x 5/32″	No. 8	5.00	No. 20	8.50	13.50
3/16″ x 3/16″	No. 8	5.00	No. 20	8.50	13.50
7/32″ x 7/32″	No. 8	5.00	No. 20	8.50	13.50
1/4″ x 1/4″	No. 8	5.00	No. 20	8.50	13.50
9/32″ x 9/32″	No. 8	5.00	No. 20	8.50	13.50
5/16″ x 5/16″	No. 8	5.00	No. 20	8.50	13.50
11/32″ x 11/32″	No. 28	9.50	No. 20	8.50	18.00
3/8″ x 3/8″	No. 28	9.50	No. 20	8.50	18.00
13/32 x 13/32	No. 28	9.50	No. 20	8.50	18.00
7/16″ x 7/16″	No. 28	9.50	No. 20	8.50	18.00
15/32″ x 15/32″	No. 28	9.50	No. 20	8.50	18.00
1/2″ x 1/2″	No. 28	9.50	No. 20	8.50	18.00
17/32″ x 17/32″	No. 28	9.50	No. 40	12.00	21.50
9/16″ x 9/16″	No. 28	9.50	No. 40	12.00	21.50
19/32″ x 19/32″	No. 28	9.50	No. 40	12.00	21.50
5/8″ x 5/8″	No. 28	9.50	No. 40	12.00	21.50
21/32″ x 21/32″	No. 28	9.50	No. 40	12.00	21.50
11/16″ x 11/16″	No. 28	9.50	No. 40	12.00	21.50
23/32 x 23/32	No. 28	10.00	No. 40	12.00	22.00
3/4″ x 3/4″	No. 28	10.00	No. 40	12.00	22.00
25/32″ x 25/32″	No. 28	10.00	No. 40	12.00	22.00
13/16″ x 13/16″	No. 28	11.00	No. 40	13.20	24.20
27/32″ x 27/32″	No. 28	11.00	No. 40	13.20	24.20
7/8″ x 7/8″	No. 28	11.00	No. 40	13.20	24.20
29/32″ x 29/32″	No. 28	11.00	No. 40	13.20	24.20
15/16″ x 15/16″	No. 28	11.00	No. 40	13.20	24.20
31/32″ x 31/32″	No. 28	11.00	No. 40	13.20	24.20
1″ x 1″	No. 28	11.00	No. 40	13.20	24.20
1-1/16″ x 1-1/16″	No. 28	11.00	No. 40	13.20	24.20
1-1/8″ x 1-1/8″	No. 28	11.75	No. 28—2-3/4	15.50	27.25
1-3/16″ x 1-3/16″	No. 28	11.75	No. 28—2-3/4	15.50	27.25
1-1/4″ x 1-1/4″	No. 28	11.75	No. 28—2-3/4	15.50	27.25
1-5/16″ x 1-5/16″	No. 28	11.75	No. 28—2-3/4	15.50	27.25
1-3/8″ x 1-3/8″	No. 28	14.50	No. 28—2-3/4	16.50	31.00
1-7/16″ x 1-7/16″	No. 28	14.50	No. 28—2-3/4	16.50	31.00
1-1/2″ x 1-1/2″	No. 28	14.50	No. 28—2-3/4	16.50	31.00
1-9/16″ x 1-9/16″	No. 28	14.50	No. 28—3-3/4	20.50	35.00
1-5/8″ x 1-5/8″	No. 28	14.50	No. 28—3-3/4	20.50	35.00
1-11/16″ x 1-11/16″	No. 28	14.50	No. 28—3-3/4	20.50	35.00
1-3/4″ x 1-3/4″	No. 28	14.50	No. 28—3-3/4	20.50	35.00
1-13/16″ x 1-13/16″	No. 28	18.00	No. 28—3-3/4	20.50	38.50
1-7/8″ x 1-7/8″	No. 28	18.00	No. 28—3-3/4	20.50	38.50
1-15/16″ x 1-15/16″	No. 28	18.00	No. 28—3-3/4	20.50	38.50
2″ x 2″	No. 28	18.00	No. 28—3-3/4	20.50	38.50
2-1/2″ x 2-1/2″	No. 28	26.50	No. 28—4-3/4	40.00	66.50
	No. 28—1-9/16	34.50	No. 28—4-3/4	40.00	74.50
	No. 28—2	50.00	No. 28—4-3/4	40.00	90.00
3″ x 3″	No. 28	33.25	Die and Die Shoe One Unit State Press to be Used With	65.00	98.25
	No. 28—1-9/16	51.25		65.00	116.25
	No. 28—2	57.00		65.00	122.00
4″ x 4″	No. 28	53.25		115.00	168.25
	No. 28—1-9/16	71.25		115.00	186.25
	No. 28—2	77.25		115.00	192.25

STANDARD DOUBLE ANGLE NOTCHING PUNCH and DIE



Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
60°-90°	No. 28	$14.00	No. 28—2-3/4	$ 19.00	$ 33.00

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

TYPE N

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/16" x 1/2"	No. 28	$11.00	No. 20	$13.20	$24.20
1/16" x 3/4"	No. 28	11.00	No. 40	15.40	26.40
1/16" x 1"	No. 28	13.20	No. 40	15.40	28.60
1/16" x 1-1/32"	No. 28	13.20	No. 40	15.40	28.60
1/16" x 2"	No. 28	17.60	No. 28—2-3/4	22.00	39.60
1/16" x 2-1/32"	No. 28	17.60	No. 28—2-3/4	22.00	39.60
3/32" x 1/4"	No. 8	10.45	No. 20	13.20	23.65
3/32" x 3/8"	No. 8	10.45	No. 20	13.20	23.65
3/32" x 1/2"	No. 28	11.00	No. 20	13.20	24.20
3/32" x 5/8"	No. 28	11.00	No. 20	13.20	24.20
3/32" x 3/4"	No. 28	11.00	No. 40	15.40	26.40
3/32" x 7/8"	No. 28	11.00	No. 40	15.40	26.40
3/32" x 1"	No. 28	13.20	No. 40	15.40	28.60
3/32" x 1-1/32"	No. 28	13.20	No. 40	15.40	28.60
1/8" x 3/16"	No. 8	6.60	No. 20	9.35	15.95
1/8" x 1/4"	No. 8	6.60	No. 20	9.35	15.95
1/8" x 5/16"	No. 8	6.60	No. 20	9.35	15.95
1/8" x 3/8"	No. 8	6.60	No. 20	9.35	15.95
1/8" x 7/16"	No. 28	7.70	No. 20	9.35	17.05
1/8" x 1/2"	No. 28	7.70	No. 20	9.35	17.05
1/8" x 9/16"	No. 28	7.70	No. 40	12.65	20.35
1/8" x 5/8"	No. 28	7.70	No. 40	12.65	20.35
1/8" x 11/16"	No. 28	7.70	No. 40	12.65	20.35
1/8" x 3/4"	No. 28	7.70	No. 40	12.65	20.35
1/8" x 13/16"	No. 28	7.70	No. 40	12.65	20.35
1/8" x 7/8"	No. 28	7.70	No. 40	12.65	20.35
1/8" x 15/16"	No. 28	7.70	No. 40	12.65	20.35
1/8" x 1"	No. 28	8.80	No. 40	12.65	21.45
1/8" x 1-1/32"	No. 28	8.80	No. 40	12.65	21.45
1/8" x 1-1/4"	No. 28	13.75	No. 28—2-3/4	16.50	30.25
1/8" x 1-1/2"	No. 28	13.75	No. 28—2-3/4	16.50	30.25
1/8" x 1-3/4"	No. 28	13.75	No. 28—2-3/4	16.50	30.25
1/8" x 2"	No. 28	13.75	No. 28—2-3/4	16.50	30.25
5/32" x 1/4"	No. 8	6.60	No. 20	9.35	15.95
5/32" x 3/8"	No. 8	6.60	No. 20	9.35	15.95
5/32" x 1/2"	No. 28	7.70	No. 20	9.35	17.05
5/32" x 5/8"	No. 28	7.70	No. 20	9.35	17.05
5/32" x 3/4"	No. 28	7.70	No. 40	12.65	20.35
5/32" x 7/8"	No. 28	7.70	No. 40	12.65	20.35
5/32" x 1"	No. 28	8.80	No. 40	12.65	21.45
5/32" x 1-1/32"	No. 28	8.80	No. 40	12.65	21.45
3/16" x 1/4"	No. 8	6.60	No. 20	9.35	15.95
3/16" x 5/16"	No. 8	6.60	No. 20	9.35	15.95
3/16" x 3/8"	No. 8	6.60	No. 20	9.35	15.95
3/16" x 7/16"	No. 28	7.70	No. 20	9.35	17.05
3/16" x 1/2"	No. 28	7.70	No. 20	9.35	17.05
3/16" x 9/16"	No. 28	7.70	No. 40	12.65	20.35
3/16" x 5/8"	No. 28	7.70	No. 40	12.65	20.35
3/16" x 11/16"	No. 28	7.70	No. 40	12.65	20.35
3/16" x 3/4"	No. 28	7.70	No. 40	12.65	20.35
3/16" x 13/16"	No. 28	7.70	No. 40	12.65	20.35
3/16" x 7/8"	No. 28	7.70	No. 40	12.65	20.35
3/16" x 15/16"	No. 28	7.70	No. 40	12.65	20.35
3/16" x 1"	No. 28	8.80	No. 40	12.65	21.45
3/16" x 1-1/32"	No. 28	8.80	No. 40	12.65	21.45
3/16" x 1-1/4"	No. 28	10.45	No. 28—2-3/4	16.50	26.95
3/16" x 1-1/2"	No. 28	11.00	No. 28—2-3/4	16.50	27.50
3/16" x 1-3/4"	No. 28	12.10	No. 28—2-3/4	16.50	28.60
3/16" x 2"	No. 28	13.75	No. 28—2-3/4	16.50	30.25
7/32" x 1/4"	No. 8	6.60	No. 20	9.35	15.95
7/32" x 3/8"	No. 8	6.60	No. 20	9.35	15.95

TYPE N

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
7/32" x 1/2"	No. 28	$ 7.70	No. 20	$ 9.35	$17.05
7/32" x 5/8"	No. 28	7.70	No. 20	9.35	17.05
7/32" x 3/4"	No. 28	7.70	No. 40	12.65	20.35
7/32" x 7/8"	No. 28	7.70	No. 40	12.65	20.35
7/32" x 1"	No. 28	8.80	No. 40	12.65	21.45
7/32" x 1-1/32"	No. 28	8.80	No. 40	12.65	21.45
1/4" x 5/16"	No. 8	6.60	No. 20	9.35	15.95
1/4" x 3/8"	No. 8	6.60	No. 20	9.35	15.95
1/4" x 7/16"	No. 28	7.70	No. 20	9.35	17.05
1/4" x 1/2"	No. 28	7.70	No. 20	9.35	17.05
1/4" x 9/16"	No. 28	7.70	No. 40	12.65	20.35
1/4" x 5/8"	No. 28	7.70	No. 40	12.65	20.35
1/4" x 11/16"	No. 28	7.70	No. 40	12.65	20.35
1/4" x 3/4"	No. 28	7.70	No. 40	12.65	20.35
1/4" x 13/16"	No. 28	7.70	No. 40	12.65	20.35
1/4" x 7/8"	No. 28	7.70	No. 40	12.65	20.35
1/4" x 15/16"	No. 28	7.70	No. 40	12.65	20.35
1/4" x 1"	No. 28	8.80	No. 40	12.65	21.45
1/4" x 1-1/32"	No. 28	8.80	No. 40	12.65	21.45
1/4" x 1-1/4"	No. 28	10.45	No. 28—2-3/4	16.50	26.95
1/4" x 1-1/2"	No. 28	11.00	No. 28—2-3/4	16.50	27.50
1/4" x 1-3/4"	No. 28	12.10	No. 28—2-3/4	16.50	28.60
1/4" x 2"	No. 28	13.75	No. 28—2-3/4	16.50	30.25
9/32" x 3/8"	No. 8	6.60	No. 20	9.35	15.95
9/32" x 1/2"	No. 28	7.70	No. 20	9.35	17.05
9/32" x 5/8"	No. 28	7.70	No. 40	12.65	20.35
9/32" x 3/4"	No. 28	7.70	No. 40	12.65	20.35
9/32" x 7/8"	No. 28	7.70	No. 40	12.65	20.35
9/32" x 1"	No. 28	8.80	No. 40	12.65	21.45
9/32" x 1-1/32"	No. 28	8.80	No. 40	12.65	21.45
5/16" x 3/8"	No. 28	7.70	No. 20	9.35	17.05
5/16" x 7/16"	No. 28	7.70	No. 20	9.35	17.05
5/16" x 1/2"	No. 28	7.70	No. 20	9.35	17.05
5/16" x 9/16"	No. 28	7.70	No. 40	12.65	20.35
5/16" x 5/8"	No. 28	7.70	No. 40	12.65	20.35
5/16" x 11/16"	No. 28	7.70	No. 40	12.65	20.35
5/16" x 3/4"	No. 28	7.70	No. 40	12.65	20.35
5/16" x 13/16"	No. 28	7.70	No. 40	12.65	20.35
5/16" x 7/8"	No. 28	7.70	No. 40	12.65	20.35
5/16" x 15/16"	No. 28	7.70	No. 40	12.65	20.35
5/16" x 1"	No. 28	8.80	No. 40	12.65	21.45
5/16" x 1-1/32"	No. 28	8.80	No. 40	12.65	21.45
5/16" x 1-1/4"	No. 28	10.45	No. 28—2-3/4	16.50	26.95
5/16" x 1-1/2"	No. 28	11.00	No. 28—2-3/4	16.50	27.50
5/16" x 1-3/4"	No. 28	12.10	No. 28—2-3/4	16.50	28.60
5/16" x 2"	No. 28	13.75	No. 28—2-3/4	16.50	30.25
11/32" x 3/8"	No. 28	7.70	No. 20	9.35	17.05
11/32" x 1/2"	No. 28	7.70	No. 20	9.35	17.05
11/32" x 5/8"	No. 28	7.70	No. 40	12.65	20.35
11/32" x 3/4"	No. 28	7.70	No. 40	12.65	20.35
11/32" x 7/8"	No. 28	7.70	No. 40	12.65	20.35
11/32" x 1"	No. 28	8.80	No. 40	12.65	21.45
11/32" x 1-1/32"	No. 28	8.80	No. 40	12.65	21.45
3/8" x 7/16"	No. 28	7.70	No. 20	9.35	17.05
3/8" x 1/2"	No. 28	7.70	No. 20	9.35	17.05
3/8" x 9/16"	No. 28	7.70	No. 40	12.65	20.35
3/8" x 5/8"	No. 28	7.70	No. 40	12.65	20.35
3/8" x 11/16"	No. 28	7.70	No. 40	12.65	20.35
3/8" x 3/4"	No. 28	7.70	No. 40	12.65	20.35
3/8" x 13/16"	No. 28	7.70	No. 40	12.65	20.35
3/8" x 7/8"	No. 28	7.70	No. 40	12.65	20.35

TYPE N

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
3/8″ x 15/16″	No. 28	$ 7.70	No. 40	$12.65	$20.35
3/8″ x 1″	No. 28	8.80	No. 40	12.65	21.45
3/8″ x 1-1/32″	No. 28	8.80	No. 40	12.65	21.45
3/8″ x 1-1/4″	No. 28	10.45	No. 28—2-3/4	16.50	26.95
3/8″ x 1-1/2″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
3/8″ x 1-3/4″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
3/8″ x 2″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
13/32″ x 3/4″	No. 28	7.70	No. 40	12.65	20.35
13/32″ x 13/16″	No. 28	7.70	No. 40	12.65	20.35
13/32″ x 7/8″	No. 28	7.70	No. 40	12.65	20.35
13/32″ x 1″	No. 28	8.80	No. 40	12.65	21.45
13/32″ x 1-1/32″	No. 28	8.80	No. 40	12.65	21.45
7/16″ x 1/2″	No. 28	7.70	No. 20	9.35	17.05
7/16″ x 9/16″	No. 28	7.70	No. 40	12.65	20.35
7/16″ x 5/8″	No. 28	7.70	No. 40	12.65	20.35
7/16″ x 11/16″	No. 28	7.70	No. 40	12.65	20.35
7/16″ x 3/4″	No. 28	7.70	No. 40	12.65	20.35
7/16″ x 13/16″	No. 28	7.70	No. 40	12.65	20.35
7/16″ x 7/8″	No. 28	7.70	No. 40	12.65	20.35
7/16″ x 15/16″	No. 28	8.80	No. 40	12.65	21.45
7/16″ x 1″	No. 28	8.80	No. 40	12.65	21.45
7/16″ x 1-1/32″	No. 28	8.80	No. 40	12.65	21.45
7/16″ x 1-1/4″	No. 28	10.45	No. 28—2-3/4	16.50	26.95
7/16″ x 1-1/2″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
7/16″ x 1-3/4″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
7/16″ x 2″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
1/2″ x 9/16″	No. 28	7.70	No. 40	12.65	20.35
1/2″ x 5/8″	No. 28	7.70	No. 40	12.65	20.35
1/2″ x 11/16″	No. 28	7.70	No. 40	12.65	20.35
1/2″ x 3/4″	No. 28	7.70	No. 40	12.65	20.35
1/2″ x 13/16″	No. 28	7.70	No. 40	12.65	20.35
1/2″ x 7/8″	No. 28	8.80	No. 40	12.65	21.45
1/2″ x 15/16″	No. 28	8.80	No. 40	12.65	21.45
1/2″ x 1″	No. 28	8.80	No. 40	12.65	21.45
1/2″ x 1-1/32″	No. 28	8.80	No. 40	12.65	21.45
1/2″ x 1-1/4″	No. 28	10.45	No. 28—2-3/4	16.50	26.95
1/2″ x 1-1/2″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
1/2″ x 1-3/4″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
1/2″ x 2″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
17/32″ x 3/4″	No. 28	7.70	No. 40	12.65	20.35
17/32″ x 7/8″	No. 28	8.80	No. 40	12.65	21.45
17/32″ x 1″	No. 28	8.80	No. 40	12.65	21.45
17/32″ x 1-1/32″	No. 28	8.80	No. 40	12.65	21.45
17/32″ x 1-9/32″	No. 28	10.45	No. 28—2-3/4	16.50	26.95
17/32″ x 1-11/32″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
17/32″ x 1-13/32″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
17/32″ x 1-15/32″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
17/32″ x 1-17/32″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
9/16″ x 5/8″	No. 28	7.70	No. 40	12.65	20.35
9/16″ x 11/16″	No. 28	7.70	No. 40	12.65	20.35
9/16″ x 3/4″	No. 28	7.70	No. 40	12.65	20.35
9/16″ x 13/16″	No. 28	7.70	No. 40	12.65	20.35
9/16″ x 7/8″	No. 28	8.80	No. 40	12.65	21.45
9/16″ x 15/16″	No. 28	8.80	No. 40	12.65	21.45
9/16″ x 1″	No. 28	8.80	No. 40	12.65	21.45
9/16″ x 1-1/32″	No. 28	8.80	No. 40	12.65	21.45
9/16″ x 1-1/4″	No. 28	10.45	No. 28—2-3/4	16.50	26.95
9/16″ x 1-1/2″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
9/16″ x 1-3/4″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
9/16″ x 2″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
5/8″ x 11/16″	No. 28	7.70	No. 40	12.65	20.35

TYPE N

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
5/8″ x 3/4″	No. 28	$ 7.70	No. 40	$12.65	$20.35
5/8″ x 13/16″	No. 28	8.80	No. 40	12.65	21.45
5/8″ x 7/8″	No. 28	8.80	No. 40	12.65	21.45
5/8″ x 15/16″	No. 28	8.80	No. 40	12.65	21.45
5/8″ x 1″	No. 28	8.80	No. 40	12.65	21.45
5/8″ x 1-1/32″	No. 28	10.45	No. 40	12.65	23.10
5/8″ x 1-1/4″	No. 28	10.45	No. 28—2-3/4	16.50	26.95
5/8″ x 1-1/2″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
5/8″ x 1-3/4″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
5/8″ x 2″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
11/16″ x 3/4″	No. 28	8.80	No. 40	12.65	21.45
11/16″ x 13/16″	No. 28	8.80	No. 40	12.65	21.45
11/16″ x 7/8″	No. 28	8.80	No. 40	12.65	21.45
11/16″ x 15/16″	No. 28	8.80	No. 40	12.65	21.45
11/16″ x 1″	No. 28	8.80	No. 40	12.65	21.45
11/16″ x 1-1/32″	No. 28	10.45	No. 40	12.65	23.10
11/16″ x 1-1/4″	No. 28	10.45	No. 28—2-3/4	16.50	26.95
11/16″ x 1-1/2″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
11/16″ x 1-3/4″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
11/16″ x 2″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
3/4″ x 13/16″	No. 28	8.80	No. 40	12.65	21.45
3/4″ x 7/8″	No. 28	8.80	No. 40	12.65	21.45
3/4″ x 15/16″	No. 28	8.80	No. 40	12.65	21.45
3/4″ x 1″	No. 28	10.45	No. 40	12.65	23.10
3/4″ x 1-1/32″	No. 28	10.45	No. 40	12.65	23.10
3/4″ x 1-1/4″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
3/4″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
3/4″ x 1-3/4″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
3/4″ x 2″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
13/16″ x 7/8″	No. 28	8.80	No. 40	12.65	21.45
13/16″ x 15/16″	No. 28	10.45	No. 40	12.65	23.10
13/16″ x 1″	No. 28	10.45	No. 40	12.65	23.10
13/16″ x 1-1/32″	No. 28	10.45	No. 40	12.65	23.10
13/16″ x 1-1/4″	No. 28	10.45	No. 28—2-3/4	16.50	26.95
13/16″ x 1-1/2″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
13/16″ x 1-3/4″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
13/16″ x 2″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
7/8″ x 15/16″	No. 28	10.45	No. 40	12.65	23.10
7/8″ x 1″	No. 28	10.45	No. 40	12.65	23.10
7/8″ x 1-1/32″	No. 28	10.45	No. 40	12.65	23.10
7/8″ x 1-1/4″	No. 28	10.45	No. 28—2-3/4	16.50	26.95
7/8″ x 1-1/2″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
7/8″ x 1-3/4″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
7/8″ x 2″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
15/16″ x 1″	No. 28	11.00	No. 40	12.65	23.65
15/16″ x 1-1/32″	No. 28	11.00	No. 40	12.65	23.65
15/16″ x 1-1/4″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
15/16″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
15/16″ x 1-3/4″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
15/16″ x 2″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
1″ x 1-1/8″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
1″ x 1-3/16″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
1″ x 1-1/4″	No. 28	11.00	No. 28—2-3/4	16.50	27.50
1″ x 1-3/8″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
1″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
1″ x 1-5/8″	No. 28	12.10	No. 28—2-3/4	16.50	28.60
1″ x 1-3/4″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
1″ x 1-7/8″	No. 28	13.75	No. 28—3-3/4	20.35	34.10
1″ x 2″	No. 28	15.00	No. 28—3-3/4	20.35	35.35
1-1/32″ x 2-1/32″	No. 28	15.00	No. 28—3-3/4	20.35	35.35
1-1/8″ x 2-1/8″	No. 28	15.00	No. 28—3-3/4	20.35	35.35

TYPE M

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/16″ x 1/2″	No. 8	$11.55	No. 20	$15.40	$26.95
1/16″ x 3/4″	No. 28	12.10	No. 40	17.60	29.70
1/16″ x 1″	No. 28	14.30	No. 40	17.60	31.90
1/16″ x 1-1/32″	No. 28	14.30	No. 40	17.60	31.90
1/16″ x 2″	No. 28	18.70	No. 28—2-3/4	24.20	42.90
1/16″ x 2-1/32″	No. 28	18.70	No. 28—2-3/4	24.20	42.90
3/32″ x 1/4″	No. 8	11.55	No. 20	15.40	26.95
3/32″ x 3/8″	No. 8	11.55	No. 20	15.40	26.95
3/32″ x 1/2″	No. 8	11.55	No. 20	15.40	26.95
3/32″ x 5/8″	No. 28	12.10	No. 20	15.40	27.50
3/32″ x 3/4″	No. 28	12.10	No. 40	17.60	29.70
3/32″ x 7/8″	No. 28	12.10	No. 40	17.60	29.70
3/32″ x 1″	No. 28	14.30	No. 40	17.60	31.90
3/32″ x 1-1/32″	No. 28	14.30	No. 40	17.60	31.90
1/8″ x 3/16″	No. 8	7.70	No. 20	11.55	19.25
1/8″ x 1/4″	No. 8	7.70	No. 20	11.55	19.25
1/8″ x 5/16″	No. 8	7.70	No. 20	11.55	19.25
1/8″ x 3/8″	No. 8	7.70	No. 20	11.55	19.25
1/8″ x 7/16″	No. 8	7.70	No. 20	11.55	19.25
1/8″ x 1/2″	No. 8	7.70	No. 20	11.55	19.25
1/8″ x 9/16″	No. 28	8.80	No. 20	11.55	20.35
1/8″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
1/8″ x 11/16″	No. 28	8.80	No. 20	11.55	20.35
1/8″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
1/8″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
1/8″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
1/8″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
1/8″ x 1″	No. 28	9.90	No. 40	14.85	24.75
1/8″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
1/8″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
1/8″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
1/8″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
1/8″ x 2″	No. 28	14.85	No. 28—2-3/4	18.70	33.55
5/32″ x 1/4″	No. 8	7.70	No. 20	11.55	19.25
5/32″ x 3/8″	No. 8	7.70	No. 20	11.55	19.25
5/32″ x 1/2″	No. 8	7.70	No. 20	11.55	19.25
5/32″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
5/32″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
5/32″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
5/32″ x 1″	No. 28	9.90	No. 40	14.85	24.75
5/32″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
3/16″ x 1/4″	No. 8	7.70	No. 20	11.55	19.25
3/16″ x 5/16″	No. 8	7.70	No. 20	11.55	19.25
3/16″ x 3/8″	No. 8	7.70	No. 20	11.55	19.25
3/16″ x 7/16″	No. 8	7.70	No. 20	11.55	19.25
3/16″ x 1/2″	No. 8	7.70	No. 20	11.55	19.25
3/16″ x 9/16″	No. 28	8.80	No. 20	11.55	20.35
3/16″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
3/16″ x 11/16″	No. 28	8.80	No. 20	11.55	20.35
3/16″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
3/16″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
3/16″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
3/16″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
3/16″ x 1″	No. 28	9.90	No. 40	14.85	24.75
3/16″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
3/16″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
3/16″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
3/16″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
3/16″ x 2″	No. 28	14.85	No. 28—2-3/4	18.70	33.55
7/32″ x 1/4″	No. 8	7.70	No. 20	11.55	19.25
7/32″ x 3/8″	No. 8	7.70	No. 20	11.55	19.25

TYPE M

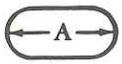
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
7/32″ x 1/2″	No. 8	$7.70	No. 20	$11.55	$19.25
7/32″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
7/32″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
7/32″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
7/32″ x 1″	No. 28	9.90	No. 40	14.85	24.75
7/32″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
1/4″ x 5/16″	No. 8	7.70	No. 20	11.55	19.25
1/4″ x 3/8″	No. 8	7.70	No. 20	11.55	19.25
1/4″ x 7/16″	No. 8	7.70	No. 20	11.55	19.25
1/4″ x 1/2″	No. 8	7.70	No. 20	11.55	19.25
1/4″ x 9/16″	No. 28	8.80	No. 20	11.55	20.35
1/4″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
1/4″ x 11/16″	No. 28	8.80	No. 20	11.55	20.35
1/4″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
1/4″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
1/4″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
1/4″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
1/4″ x 1″	No. 28	9.90	No. 40	14.85	24.75
1/4″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
1/4″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
1/4″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
1/4″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
1/4″ x 2″	No. 28	14.85	No. 28—2-3/4	18.10	33.55
9/32″ x 3/8″	No. 8	7.70	No. 20	11.55	19.25
9/32″ x 1/2″	No. 8	7.70	No. 20	11.55	19.25
9/32″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
9/32″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
9/32″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
9/32″ x 1″	No. 28	9.90	No. 40	14.85	24.75
9/32″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
5/16″ x 3/8″	No. 8	7.70	No. 20	11.55	19.25
5/16″ x 7/16″	No. 8	7.70	No. 20	11.55	19.25
5/16″ x 1/2″	No. 8	7.70	No. 20	11.55	19.25
5/16″ x 9/16″	No. 28	8.80	No. 20	11.55	20.35
5/16″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
5/16″ x 11/16″	No. 28	8.80	No. 20	11.55	20.35
5/16″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
5/16″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
5/16″ x 5/8″	No. 28	8.80	No. 40	14.85	23.65
5/16″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
5/16″ x 1″	No. 28	9.90	No. 40	14.85	24.75
5/16″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
5/16″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
5/16″ x 1-1/2″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
5/16″ x 1-3/4″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
5/16″ x 2″	No. 28	14.85	No. 28—2-3/4	18.70	33.55
11/32″ x 3/8″	No. 8	7.70	No. 20	11.55	19.25
11/32″ x 1/2″	No. 28	7.70	No. 20	11.55	19.25
11/32″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
11/32″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
11/32″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
11/32″ x 1″	No. 28	9.90	No. 40	14.85	24.75
11/32″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
3/8″ x 7/16″	No. 8	8.80	No. 20	11.55	20.35
3/8″ x 1/2″	No. 28	8.80	No. 20	11.55	20.35
3/8″ x 9/16″	No. 28	8.80	No. 20	11.55	20.35
3/8″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
3/8″ x 11/16″	No. 28	8.80	No. 20	11.55	20.35
3/8″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
3/8″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
3/8″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65

TYPE M

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
3/8″ x 15/16″	No. 28	$ 8.80	No. 40	$14.85	$23.65
3/8″ x 1″	No. 28	9.90	No. 40	14.85	24.75
3/8″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
3/8″ x 1-1/4″	No. 28	11.55	No. 28	14.85	26.40
3/8″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
3/8″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
3/8″ x 2″	No. 28	14.85	No. 28—2-3/4	18.70	33.55
13/32″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
13/32″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
13/32″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
13/32″ x 1″	No. 28	9.90	No. 40	14.85	24.75
13/32″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
7/16″ x 1/2″	No. 28	8.80	No. 20	11.55	20.35
7/16″ x 9/16″	No. 28	8.80	No. 20	11.55	20.35
7/16″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
7/16″ x 11/16″	No. 28	8.80	No. 20	11.55	20.35
7/16″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
7/16″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
7/16″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
7/16″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
7/16″ x 1″	No. 28	9.90	No. 40	14.85	24.75
7/16″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
7/16″ x 1-1/4″	No. 28	11.55	No. 28	18.70	30.25
7/16″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
7/16″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
7/16″ x 2″	No. 28	14.85	No. 28—2-3/4	18.70	33.55
1/2″ x 9/16″	No. 28	8.80	No. 20	11.55	20.35
1/2″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
1/2″ x 11/16″	No. 28	8.80	No. 20	11.55	20.35
1/2″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
1/2″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
1/2″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
1/2″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
1/2″ x 1″	No. 28	9.90	No. 40	14.85	24.75
1/2″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
1/2″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
1/2″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
1/2″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
1/2″ x 2″	No. 28	14.85	No. 28—2-3/4	18.70	33.55
17/32″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
17/32″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
17/32″ x 1″	No. 28	9.90	No. 40	14.85	24.75
17/32″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
17/32″ x 1-9/32″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
17/32″ x 1-11/32″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
17/32″ x 1-13/32″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
17/32″ x 1-15/32″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
17/32″ x 1-17/32″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
9/16″ x 5/8″	No. 28	8.80	No. 20	11.55	20.35
9/16″ x 11/16″	No. 28	8.80	No. 20	11.55	20.35
9/16″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
9/16″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
9/16″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
9/16″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
9/16″ x 1″	No. 28	9.90	No. 40	14.85	24.75
9/16″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
9/16″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
9/16″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
9/16″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
9/16″ x 2″	No. 28	14.85	No. 28—2-3/4	18.70	33.55
5/8″ x 11/16″	No. 28	8.80	No. 40	14.85	23.65

TYPE M

Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
5/8″ x 3/4″	No. 28	$ 8.80	No. 40	$14.85	$23.65
5/8″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
5/8″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
5/8″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
5/8″ x 1″	No. 28	9.90	No. 40	14.85	24.75
5/8″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
5/8″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
5/8″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
5/8″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
5/8″ x 2″	No. 28	14.85	No. 28—2-3/4	18.70	33.55
11/16″ x 3/4″	No. 28	8.80	No. 40	14.85	23.65
11/16″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
11/16″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
11/16″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
11/16″ x 1″	No. 28	9.90	No. 40	14.85	24.75
11/16″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
11/16″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
11/16″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
11/16″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
11/16″ x 2″	No. 28	14.85	No. 28—2-3/4	18.70	33.55
3/4″ x 13/16″	No. 28	8.80	No. 40	14.85	23.65
3/4″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
3/4″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
3/4″ x 1″	No. 28	9.90	No. 40	14.85	24.75
3/4″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
3/4″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
3/4″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
3/4″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
3/4″ x 2″	No. 28	14.85	No. 28—2-3/4	18.70	33.55
13/16″ x 7/8″	No. 28	8.80	No. 40	14.85	23.65
13/16″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
13/16″ x 1″	No. 28	9.90	No. 40	14.85	24.75
13/16″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
13/16″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
13/16″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
13/16″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
13/16″ x 2″	No. 28	14.85	No. 28—2-3/4	18.70	33.55
7/8″ x 15/16″	No. 28	8.80	No. 40	14.85	23.65
7/8″ x 1″	No. 28	9.90	No. 40	14.85	24.75
7/8″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
7/8″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
7/8″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
7/8″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
7/8″ x 2″	No. 28	14.85	No. 28—3-3/4	22.55	37.40
15/16″ x 1″	No. 28	9.90	No. 40	14.85	24.75
15/16″ x 1-1/32″	No. 28	9.90	No. 40	14.85	24.75
15/16″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
15/16″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
15/16″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
15/16″ x 2″	No. 28	14.85	No. 28—3-3/4	22.55	37.40
1″ x 1-1/8″	No. 28	9.90	No. 28—2-3/4	18.70	28.60
1″ x 1-3/16″	No. 28	9.90	No. 28—2-3/4	18.70	28.60
1″ x 1-1/4″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
1″ x 1-3/8″	No. 28	11.55	No. 28—2-3/4	18.70	30.25
1″ x 1-1/2″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
1″ x 1-5/8″	No. 28	12.10	No. 28—2-3/4	18.70	30.80
1″ x 1-3/4″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
1″ x 1-7/8″	No. 28	13.20	No. 28—2-3/4	18.70	31.90
1″ x 2″	No. 28	14.85	No. 28—3-3/4	22.55	37.40
1-1/32″ x 2-1/32″	No. 28	14.85	No. 28—3-3/4	22.55	37.40
1-1/8″ x 2-1/8″	No. 28	14.85	No. 28—3-3/4	22.55	37.40

 FOR TYPE M	FOR TYPE N	SKETCH HOLE SIZE MEASURE A	If A = 2-1/16" to 3" Die Will be 3-3/4" O.D. If A = 3-1/16" to 4" Die Will be 4-3/4" O.D. If A = 4-1/16" to 5" Die Will be 5-3/4" O.D.

	DIE SIZE	PUNCH STYLE	PUNCH PRICE	DIE STYLE	DIE PRICE	PRICE PER SET
Type M	3-3/4" O.D.	No. 28	$25.00	No. 28—3-3/4	$25.00	$50.00
	4-3/4" O.D.	No. 28	35.00	No. 28—4-3/4	35.00	70.00
	5-3/4" O.D.	No. 28	42.50	No. 28—5-3/4	42.50	85.00
Type N	3-3/4" O.D.	No. 28	$25.00	No. 28—3-3/4	25.00	$50.00
	4-3/4" O.D.	No. 28	30.00	No. 28—4-3/4	30.00	60.00
	5-3/4" O.D.	No. 28	35.00	No. 28—5-3/4	35.00	70.00

Above Punches have a 1" Shank and are 3-1/8" Overall Length.
For above Punches with a 1-9/16" Shank and 5-1/2" Overall Length Add $18.00 to Punch Price
For above Punches with a 2" Shank and 6-1/2" Overall Length Add $24.00 to Punch Price

	PUNCH STYLE	PUNCH SIZE	PUNCH PRICE	DIE STYLE	DIE SIZE	DIE PRICE
SOFT NOT HARDENED BLANKS	No. 8	1/2"	$ .50	No. 20	13/16"	$ .50
	No. 28	1"	1.00	No. 40	1-29/64"	2.00
	No. 28	1-1/2"	2.50	No. 28—2-3/4	2"	2.75
	No. 28	2"	3.50	No. 28—3-3/4	3"	4.00
	No. 28	2-1/2"	4.50	No. 28—4-3/4	4"	6.00
	No. 28	3"	6.50	Punches smaller than 1-1/4" water hardening steel		
	No. 28	3-1/2"	7.50	Punches larger than 1-1/4" oil hardening steel		
	No. 28	4"	8.50	No. 20—1-1/4" Dies — water hardening steel		
				No. 28—2-3/4, 28—3-3/4, 28—4-3/4 oil hardening steel.		

	PUNCH STYLE	SIZE RANGE	PUNCH PRICE	DIE STYLE	SIZE RANGE	DIE PRICE
SPECIAL ALLOY STEEL ROUND PUNCHES AND DIES FOR USE WITH STAINLESS STEEL	No. 5	1/16" thru 9/32"	$2.50	No. 5	1/16" thru 9/32"	$5.00
	No. 7	3/32" thru 7/16"	4.50	No. 7	3/32" thru 7/16"	5.00
	No. 8	3/32" thru 1/2"	4.50	No. 8	3/32" thru 1/2"	5.00
	No. 10	3/32" thru 1/2"	6.00	No. 10	3/32" thru 1/2"	4.00
	No. 16	3/32" thru 9/16"	6.00	No. 16	3/32" thru 9/16"	5.00
	No. 17	3/32" thru 9/16"	6.00	No. 17	3/32" thru 9/16"	5.00
	No. 20	1/8" thru 13/16"	6.50	No. 20	1/8" thru 13/16"	5.00
	No. 40	1/8" thru 1"	8.50	No. 40	1/8" thru 1-29/64"	6.00
	No. 28	All Sizes Rounds, Add 75% to Standard Punch and Die Prices.				
	All Sizes Irregulars, Add 50% to Standard Punch and Die Prices.					

MISCELLANEOUS DATA

When ordering, indicate the make and model number of Press in which the Punches and Dies will be used and the type and thickness of metal or material they will be used with.

To determine proper Punch and Die clearance, take 10% of metal thickness to be punched. Example: Proper punching clearance for punching 3/8" (.375) thick steel would be .0375".

To determine pressure required for stripping, use 10% of pressure required for punching.

To determine capacity of an unknown Punch Press, square crankshaft diameter at main bearings and multiply by 3.5. Example: Crankshaft diameter at main bearing is 2" — 2" x 2" = 4" x 3.5 = 14 tons.

TENSILE STRENGTH (APPROXIMATE) — POUNDS PER SQUARE INCH

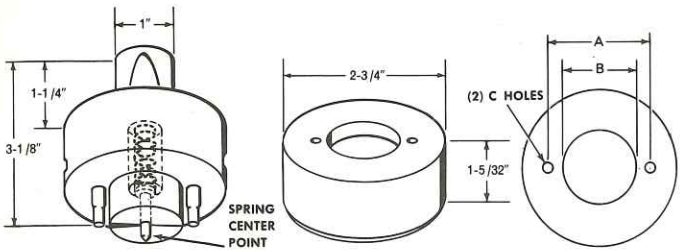
Mild Steel 60,000 lbs.	Soft Brass 40,000 lbs.	Half Hard Brass 52,000 lbs.	Soft Aluminum 18,000 lbs.	Half Hard Aluminum 35,000 lbs.	Stainless Steel 90,000 lbs.

Special F 5-3/4 Die Shoe (H 1-1/2" x L 7-1/4" x W 7")	$55.00	Special P5-3/4 Die Shoe (H 2-1/4" x L 10-1/2" x W 8")	$55.00
Special F 6-3/4 Die Shoe (H 1-1/2" x L 7-3/8" x W 8")	70.00	Special P6-3/4 Die Shoe (H 2-1/2" x L 10-1/2" x W 8")	70.00
Solid Center Point (State Length and Diameter wanted), Add to preceding Punch Prices			5.00
Spring Center Point (State Length and Diameter wanted), Add to preceding Punch Prices			7.50
Tapped Hole in Punch Point (State Size wanted), Add to preceding Punch Prices			5.00
For Shear milled on Punches (State Shear wanted), Add to preceding Punch Prices			2.50
For Shear milled on Dies (State Shear wanted), Add to preceding Die Prices			5.00
For Blanking Punches (Produces Flat Blanks — State Metal Gauge), Add 40% to preceding Punch Prices			
For radius on Punch and Die (State desired Radius and Metal Gauge), Add to preceding Prices $5.00 per corner $15.00 on all corners.			
For Heel on Punches, Add to preceding Punch Prices			$ 7.50
For Solid — Not Counterbored — Dies (For Heavy Gauge Metal), Add 30% to preceding Die Prices.			

To produce Flat Blanks, remember that the Die determines the Blank size. Punch point must be ground flat and clearance is ground on the Punch. Example: 1" Blank desired from 1/4" mild steel. Die size, 1"; Punch size, 0.975".

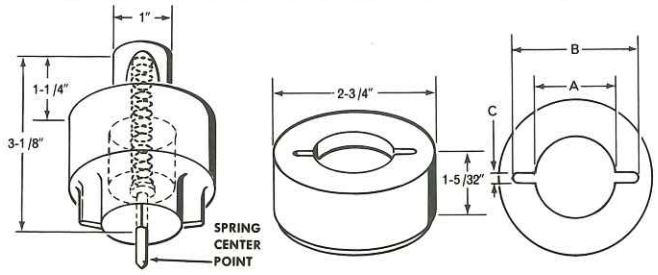
Electrical punches and dies shown, but not stocked, are for 12 gauge mild steel. For 11 gauge to 1/4" add 20%; 1/4" or thicker add 30% to price.

RECEPTACLE PUNCH and DIE — STYLE A



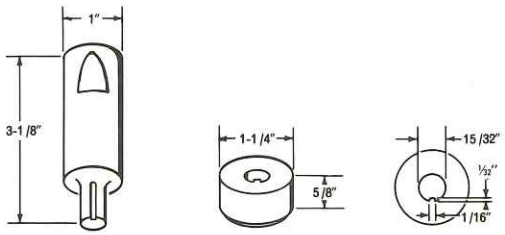
Size A	Size B	Size C	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1-1/8"	1-1/2"	3/16"	No. 28	$44.00	No. 28—2-3/4	$27.50	$71.50
1-1/4"	1-5/8"	3/16"	No. 28	44.00	No. 28—2-3/4	27.50	71.50
1-3/8"	1-13/16"	3/16"	No. 28	44.00	No. 28—2-3/4	27.50	71.50

RECEPTACLE PUNCH and DIE — STYLE B



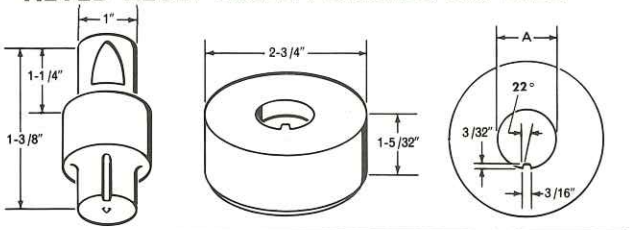
Size A	Size B	Size C	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1-1/8"	1-11/16"	3/16"	No. 28	$50.00	No. 28—2-3/4	$30.00	$80.00
1-1/4"	1-13/16"	3/16"	No. 28	50.00	No. 28—2-3/4	30.00	80.00
1-3/8"	2-1/8"	3/16"	No. 28	50.00	No. 28—2-3/4	30.00	80.00

TOGGLE SWITCH PUNCHES and DIES



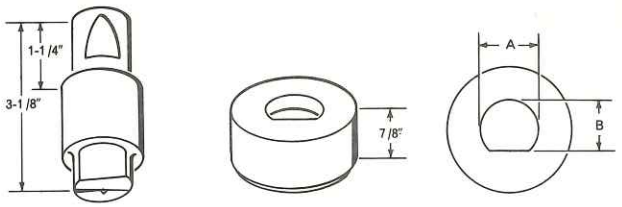
A	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
15/32"	No. 28	$14.00	No. 20	$21.00	$35.00
1/2"	No. 28	14.00	No. 20	21.00	35.00

KEYED RECEPTACLE PUNCHES and DIES



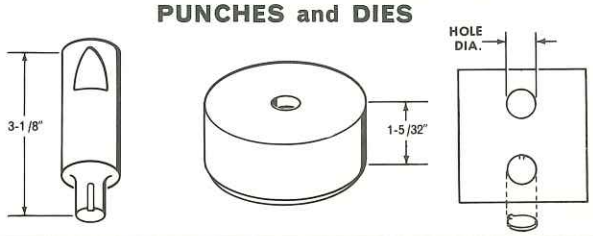
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
A=1.172	No. 28	$20.50	No. 28—2-3/4	$30.50	$51.00
A=1.327	No. 28	20.50	No. 28—2-3/4	30.50	51.00

RECEPTACLE PUNCH and DIE — STYLE D



A	B	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
.375	.350	No. 8	$ 9.00	No. 20	$11.00	$ 20.00
.406	.359	No. 8	9.00	No. 20	11.00	20.00
.501	.469	No. 28	10.00	No. 40	11.00	21.00
.562	.541	No. 28	10.00	No. 40	12.00	22.00
.626	.596	No. 28	10.00	No. 40	12.00	22.00
1.004	.963	No. 28	11.00	No. 40	13.25	24.25
1.031	.825	No. 28	11.00	No. 40	13.25	24.25
1.032	.875	No. 28	11.00	No. 40	13.25	24.25

ELECTRICAL OUTLET KNOCKOUT PUNCHES and DIES

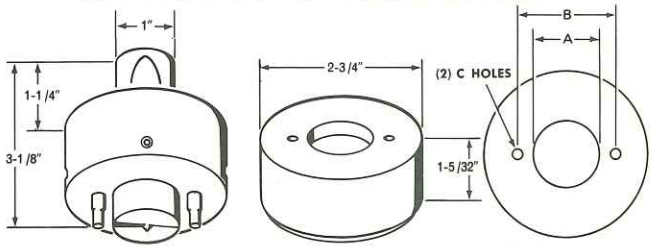


Pipe Size	Hole Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/8"	7/16"	No. 8	$ 5.50	No. 20	$ 8.00	$13.50
3/8"	11/16"	No. 28	6.50	No. 20	9.50	16.00
1/2"	7/8"	No. 28	8.00	No. 28—2-3/4	12.00	20.00
3/4"	1-1/8"	No. 28	9.00	No. 28—2-3/4	13.50	22.50
1"	1-3/8"	No. 28	10.50	No. 28—2-3/4	16.00	26.50
1-1/4"	1/11-16"	No. 28	11.50	No. 28—2-3/4	17.50	29.00

DOUBLE ELECTRICAL OUTLET KNOCKOUT PUNCHES and DIES

1/2" & 3/4"	7/8" & 1-1/8"	No. 28	$20.50	No. 28—2-3/4	$30.50	$51.00
1" & 1-1/4"	1-3/8" & 1-11/16"	No. 28	20.50	No. 28—2-3/4	30.50	51.00

MULTI SOCKET PUNCHES and DIES



Size A	Size B	Size C	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
5/8"	7/8"	1/8"	No. 28	$37.50	No. 28—2-3/4	$27.50	$65.00
3/4"	1-1/8"	1/8"	No. 28	37.50	No. 28—2-3/4	27.50	65.00
1-1/32"	1-5/8"	5/32"	No. 28	37.50	No. 28—2-3/4	27.50	65.00
1-1/8"	1-1/2"	5/32"	No. 28	37.50	No. 28—2-3/4	27.50	65.00
1-5/32"	1-5/8"	5/32"	No. 28	37.50	No. 28—2-3/4	27.50	65.00
1-5/16"	1-11/16"	5/32"	No. 28	37.50	No. 28—2-3/4	27.50	65.00

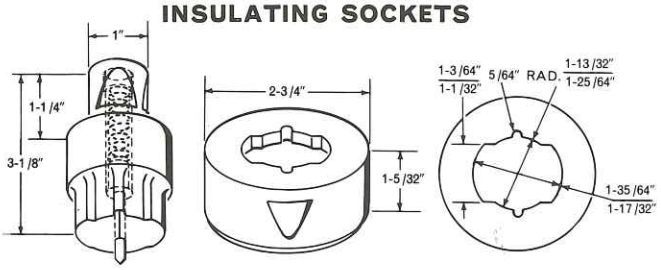
FOR ADDITIONAL STYLES AND SIZES SEND FOR ILLUSTRATED PAGES.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

STANDARD PUNCHES AND DIES

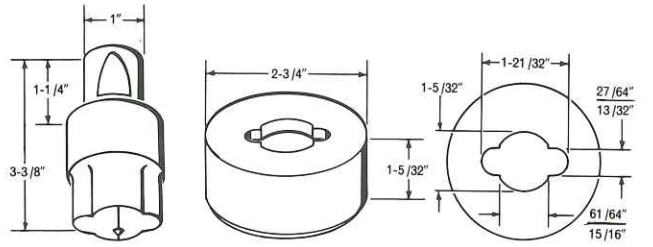
Electrical punches and dies shown, but not stocked, are for 12 gauge mild steel. For 11 gauge to 1/4" add 20%; 1/4" or thicker add 30% to price.

RECEPTACLE PUNCH and DIE FOR UNION INSULATING SOCKETS



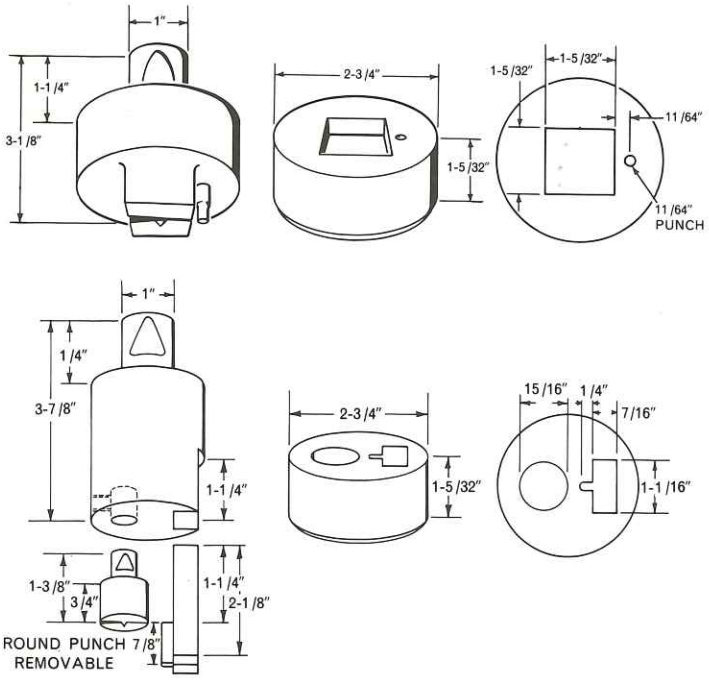
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
SEE ABOVE	No. 28	$40.00	No. 28—2-3/4	$50.00	$90.00

BRYANT FLUORESCENT LAMP HOLDER



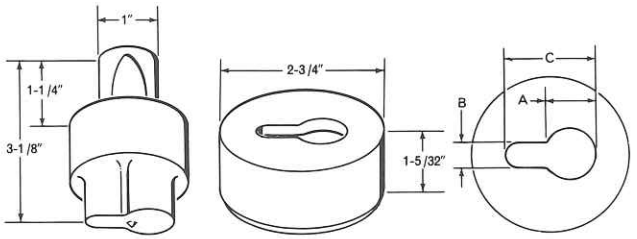
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
SEE ABOVE	No. 28	$40.00	No. 28—2-3/4	$45.00	$85.00

FLUORESCENT LIGHTING FIXTURE STARTER PUNCHES and DIES



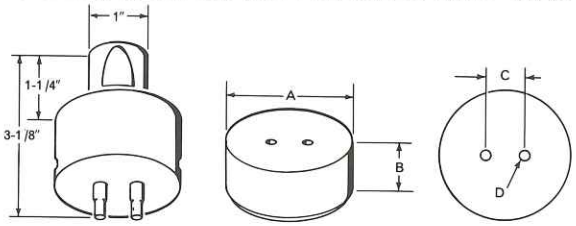
Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
SLIMLINE	No. 28	$40.00	No. 28—2-3/4	$25.00	$65.00
40 Watt	No. 28	56.00	No. 28—2-3/4	37.50	93.50

KEYHOLE PUNCHES and DIES



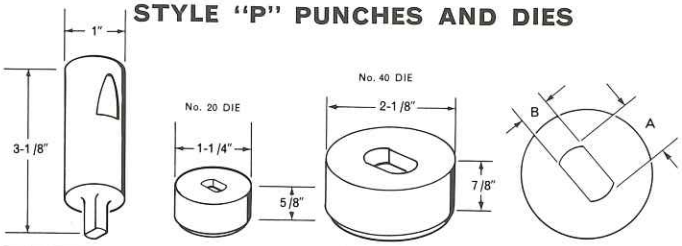
Size A	Size B	Size C	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/4"	1/8"	7/16"	No. 28	$25.00	No. 28—2-3/4	$25.00	$50.00
3/8"	3/16"	5/8"	No. 28	25.00	No. 28—2-3/4	25.00	50.00
1/2"	1/4"	7/8"	No. 28	25.00	No. 28—2-3/4	30.00	55.00
5/8"	5/16"	1"	No. 28	25.00	No. 28—2-3/4	30.00	55.00
3/4"	3/8"	1-1/4"	No. 28	25.00	No. 28—2-3/4	30.00	55.00
7/8"	7/16"	1-1/2"	No. 28	32.00	No. 28—2-3/4	38.00	70.00
1"	1/2"	1-5/8"	No. 28	32.00	No. 28—2-3/4	38.00	70.00

STARTER SOCKETS PUNCHES AND DIES



Series	A	B	C	D	Price Per Set
596, 597-C, 597-SC, 598	2-3/4"	1-5/32"	1-7/16"	5/32" Dia.	$55.00
4338 - 4338W	2-1/8"	7/8"	31/32"	5/32" Dia.	48.50
4970-4975, 4978, 4979, 4981	3-3/4"	1-5/32"	2-25/32"	9/64" Dia.	48.50
ALF272, ALF472	2-1/8"	7/8"	5/8"	5/32" Dia.	48.50
SLF772 (End mount)	2-1/8"	7/8"	5/8"	5/32" Dia.	48.50

STYLE "P" PUNCHES AND DIES



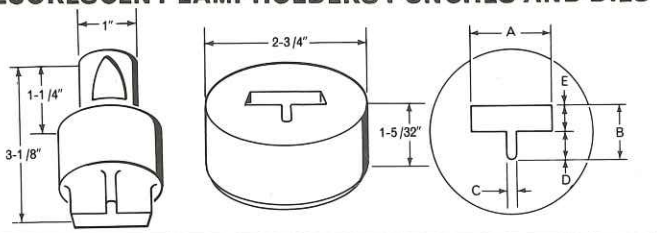
A	B	Die Size	Price Per Set
3/8"	11/32"	No. 20	$25.00
7/16"	13/32"	No. 20	25.00
1/2"	15/32"	No. 20	25.00
33/64"	15/32"	No. 20	25.00
9/16"	17/32"	No. 20	25.00
5/8"	9/16"	No. 20	25.00
21/32"	9/16"	No. 20	25.00
11/16"	9/16"	No. 20	25.00
11/16"	5/8"	No. 20	25.00
3/4"	43/64"	No. 20	25.00
7/8"	13/16"	No. 40	30.00
7/8"	27/32"	No. 40	30.00
1-3/32"	1-1/32"	No. 40	30.00

FOR ADDITIONAL STYLES AND SIZES SEND FOR ILLUSTRATED PAGES.
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

STANDARD PUNCHES AND DIES

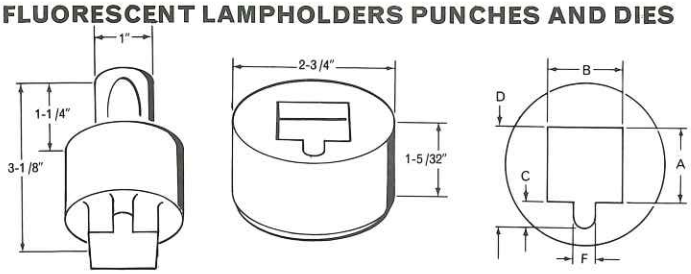
Electrical punches and dies shown, but not stocked, are for 12 gauge mild steel. For 11 gauge to 1/4" add 20%; 1/4" or thicker add 30% to price.

FLUORESCENT LAMPHOLDERS PUNCHES AND DIES



Series	A	B	C	D	E	Price Per Set
594, 594W, 594BR, 594WBR	1-3/8"	7/8"	9/64"	7/16"	7/16"	$83.00
4301, 4302	1-1/64"	11/16"	5/32"	1/4"	7/16"	83.00
751, 757	1-1/16"	3/4"	5/16"	9/32"	15/32"	83.00
751, 753, 757	1-1/32"	9/16"	5/32"	5/32"	13/32"	83.00

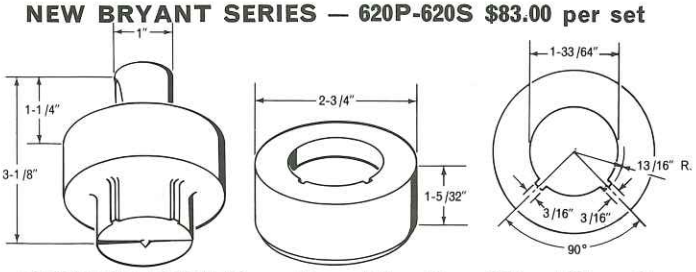
FLUORESCENT LAMPHOLDERS PUNCHES AND DIES



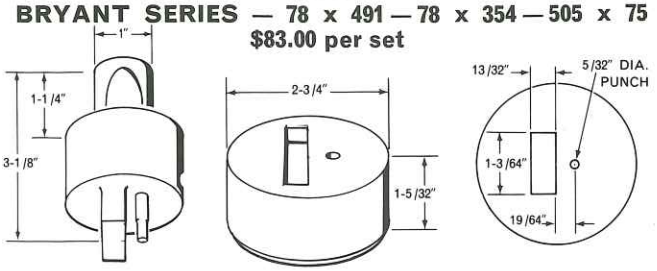
Series	A	B	C	D	F
Socket Bar	1-5/32"	1-3/16"	9/32"	1-7/16"	3/16"
Cover Bar	1-1/4"	1-1/4"	7/16"	1-11/16"	3/8"

Series	Price Per Set
755 - 756, 755L - 756L 755LX - 756LX, 900 - 901 - 917 - 918	$83.00

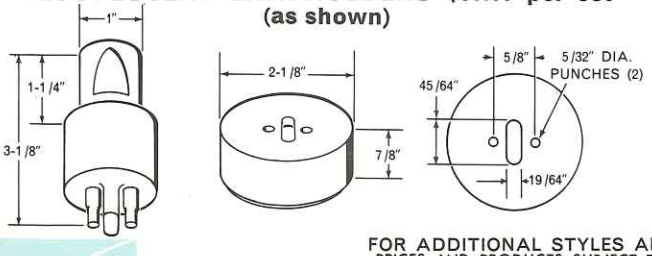
NEW BRYANT SERIES — 620P-620S $83.00 per set



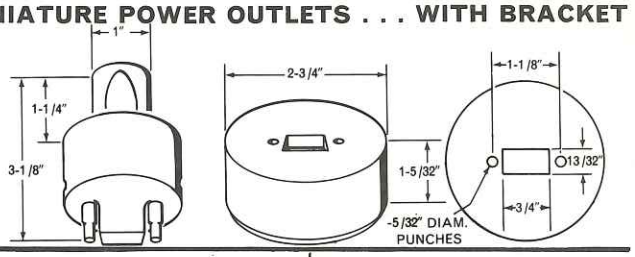
BRYANT SERIES — 78 x 491 — 78 x 354 — 505 x 75 $83.00 per set



FLUORESCENT LAMPHOLDERS $90.00 per set (as shown)

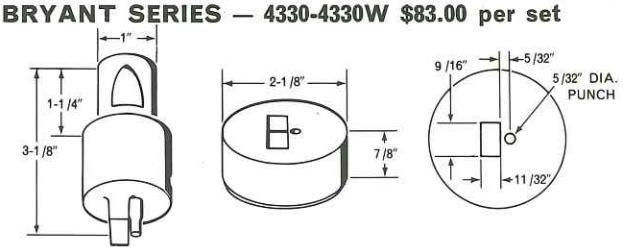


MINIATURE POWER OUTLETS . . . WITH BRACKET

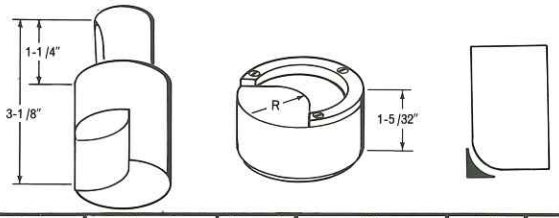


Series	Price Per Set
221, 222, 223, 224	$83.00

BRYANT SERIES — 4330-4330W $83.00 per set

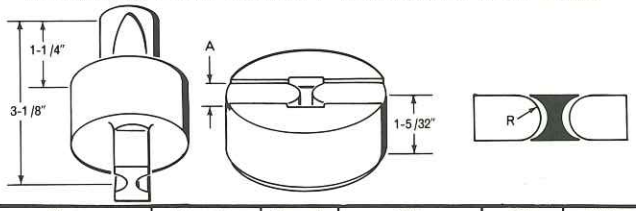


CORNER TRIMMING PUNCHES and DIES



Radius Size	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/16" R	No. 8	$27.00	No. 20	$33.00	$ 60.00
1/8" R	No. 8	27.00	No. 20	33.00	60.00
3/16" R	No. 8	27.00	No. 20	33.00	60.00
1/4" R	No. 28	27.00	No. 40	33.00	60.00
3/8" R	No. 28	27.00	No. 40	33.00	60.00
1/2" R	No. 28	27.00	No. 40	33.00	60.00
5/8" R	No. 28	43.00	No. 28—2-3/4	50.50	93.50
3/4" R	No. 28	43.00	No. 28—2-3/4	50.50	93.50
7/8" R	No. 28	43.00	No. 28—2-3/4	50.50	93.50
1" R	No. 28	43.00	No. 28—2-3/4	50.50	93.50
1-1/4" R	No. 28	49.50	No. 28—3-3/4	60.50	110.00
1-1/2" R	No. 28	49.50	No. 28—3-3/4	60.50	110.00
2" R	No. 28	58.50	No. 28—4-3/4	71.50	130.00

TRIMMING and CUTOFF PUNCHES and DIES



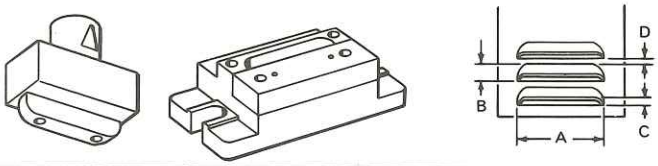
Size A	Size R	Punch Style	Punch Price	Die Style	Die Price	Price Per Set
1/4"	1/8"	No. 28	$40.00	No. 40	$45.00	$ 85.00
3/8"	3/16"	No. 28	40.00	No. 40	45.00	85.00
1/2"	1/4"	No. 28	45.00	No. 40	50.00	95.00
5/8"	5/16"	No. 28	45.00	No. 40	50.00	95.00
3/4"	3/8"	No. 28	50.00	No. 28—2-3/4	55.00	105.00
7/8"	7/16"	No. 28	55.00	No. 28—3-3/4	65.00	120.00
1"	1/2"	No. 28	55.00	No. 28—3-3/4	65.00	120.00
1-1/4"	5/8"	No. 28	60.00	No. 28—3-3/4	70.00	130.00
1-1/2"	3/4"	No. 28	65.00	No. 28—3-3/4	75.00	140.00

NOTE: For over 1/8" material request quotations.

FOR ADDITIONAL STYLES AND SIZES SEND FOR ILLUSTRATED PAGES.
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

Following punches and dies are for 12 gauge mild steel. For 11 gauge to 1/4" or heavier add 20%; 1/4" or thicker add 30% to price.

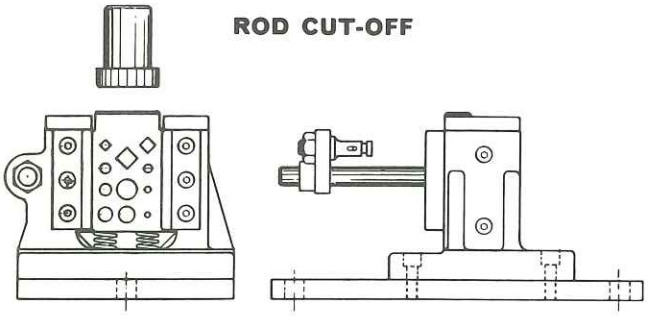
LOUVRE PUNCHES and DIES – SOLD ONLY IN SETS



Size				Price Per Set
A	B	C	D	
2"	1/2"	3/16"	1/4"	$125.00
3"	5/8"	1/4"	1/4"	140.00
4"	3/4"	1/4"	3/8"	160.00
5"	3/4"	5/16"	3/8"	180.00
6"	3/4"	5/16"	3/8"	220.00

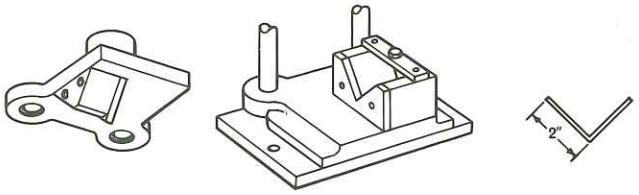
NOTE: Punches furnished with 1" - 1-9/16" or 2" Shank.

ROD CUT-OFF



Model Number	A-601	B-902	C-2403
Tonnage Required for Largest Rod Size	8 Tons	10 Tons	25 Tons
Punch Shank Size	1"	1-9/16"	2"
Round Sizes	5/32" 3/16" 1/4" 5/16" 3/8" 7/16" 1/2"	5/32" 3/16" 1/4" 5/16" 3/8" 7/16" 1/2" 5/8"	5/8" 11/16" 3/4" 7/8" 1"
Square Sizes	1/4" 3/8"	1/4" 3/8" 1/2"	5/8" 3/4"
Price Per Set	$160.00	$160.00	$250.00
Replacement Movable Die	50.00	50.00	65.00
Replacement Stationary Die	50.00	50.00	65.00

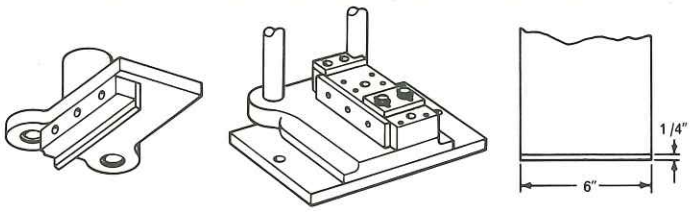
ANGLE IRON CUT-OFF PUNCH and DIE



Size of Angle	Pressure Required in Tons	Punch Shank Diameter
2" x 2" x 1/8"	13	1-9/16"
1-3/4" x 1-3/4" x 3/16"	16	1-9/16"
2" x 2" x 1/4"	25	1-9/16"
3" x 3" x 1/4"	38	2"

Size	Shank Size	Net Price
Price Per Set—Thru 2" x 2" x 1/4"	1-9/16"	$230.00
Price Per Set—Thru 3" x 3" x 1/4"	2"	300.00
Replacement Upper Blade	1-9/16"	20.00
Replacement Lower Die	1-9/16"	22.50
Replacement Upper Blade	2"	30.00
Replacement Lower Die	2"	32.50

FLAT STOCK CUT-OFF PUNCH and DIE

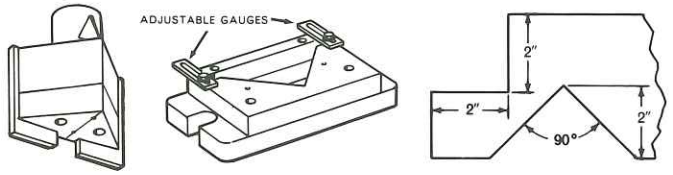


Size of Flat	Shearing Pressure Required Mild Steel
1/8" x 6"	9 Tons
3/16" x 6"	14 Tons
1/4" x 6"	18 Tons

Price Per Set	$230.00
Replacement Upper Blade	15.00
Replacement Lower Blade	15.00

NOTE: Punches furnished with 1-9/16" or 2" Shank.

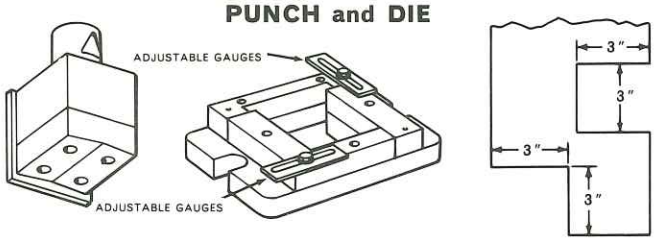
COMBINATION NOTCHING PUNCH and DIE



Price Per Set	$160.00
Replacement Upper Blade	30.00
Replacement Lower Die	40.00
Replacement Heel	10.00

NOTE: Punches furnished with 1" - 1-9/16" or 2" Shank.

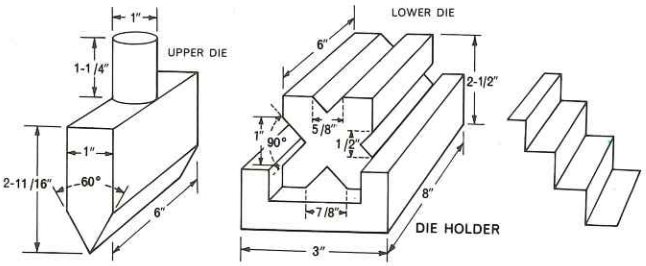
COMBINATION NOTCHING and COPING PUNCH and DIE



Price Per Set	$160.00
Replacement Upper Blade	30.00
Replacement Lower Die	60.00
Replacement Heel	10.00

NOTE: Punches furnished with 1" - 1-9/16" or 2" Shank.

No. 2800 6" 90° VEE DIE



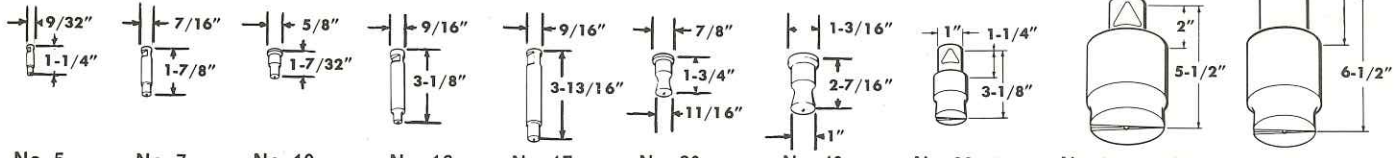
Style	Part	Price
No. 2800U	Upper Die	$22.00
No. 2800L	Lower Die	27.50
No. 2800DH	Die Holder	27.50

NOTE: Punches furnished with 1" — 1-9/16" Shank.

FOR ADDITIONAL STYLES AND SIZES SEND FOR ILLUSTRATED PAGES.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

PUNCH STYLES

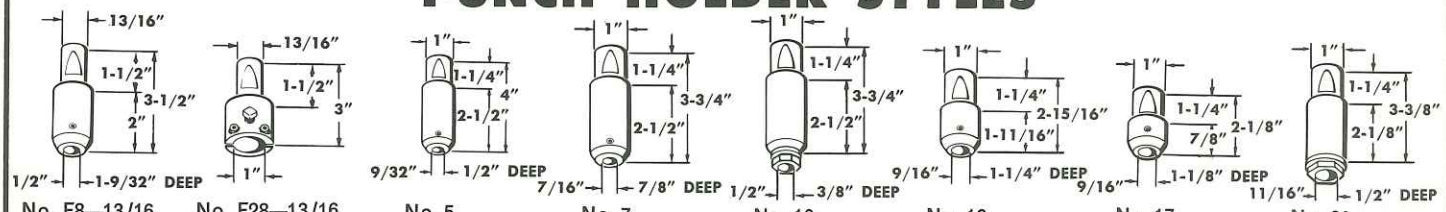


No. 5 | No. 7 | No. 10 | No. 16 | No. 17 | No. 20 | No. 40 | No. 28—1 | No. 28—1-9/16 | No. 28—2

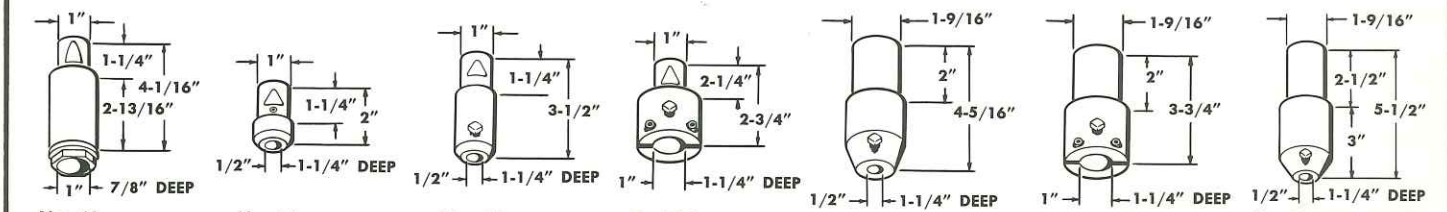
DIE STYLES

No. 10 | No. 20 | No. 40 | No. 28—2-3/4 | No. 28—3-3/4 | No. 28—4-3/4 | No. 28—5-3/4 | No. 28—6-3/4

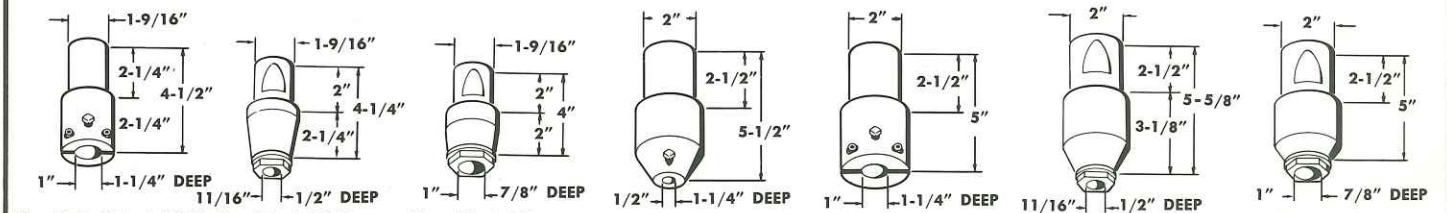
PUNCH HOLDER STYLES



No. F8—13/16 PRICE $8.00 | No. F28—13/16 PRICE $8.00 | No. 5 PRICE $7.50 | No. 7 PRICE $7.50 | No. 10 PRICE $8.50 | No. 16 PRICE $7.50 | No. 17 PRICE $7.50 | No. 20 PRICE $9.00



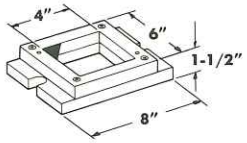
No. 40 PRICE $10.00 | No. L8 PRICE $7.50 | No. F8 PRICE $7.50 | No. F28 PRICE $11.00 | No. P8 PRICE $7.50 | No. P28 PRICE $11.00 | No. P8-431—1-9/16 PRICE $13.50



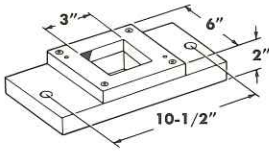
No. P28-431—1-9/16 PRICE $16.50 | No. 20—1-9/16 PRICE $10.00 | No. 40—1-9/16 PRICE $11.00 | No. P8-331 PRICE $13.50 | No. P28-331 PRICE $18.50 | No. 20—2 PRICE $18.00 | No. 40—2 PRICE $25.00

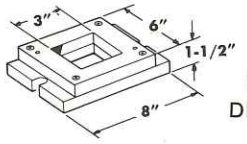
DIE AND DIE SHOE UNIT

No. F-4" SQUARE DIE AND DIE SHOE UNIT

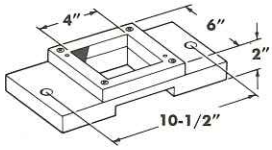


No. P-3" SQUARE DIE AND DIE SHOE UNIT



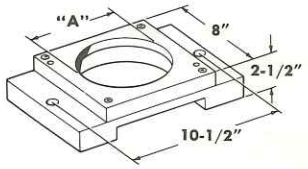


No. F-3" SQUARE DIE AND DIE SHOE UNIT

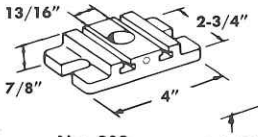


No. P-4" SQUARE DIE AND DIE SHOE UNIT

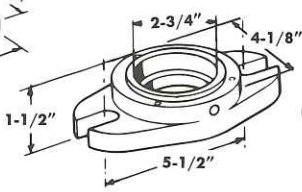
DIE AND DIE SHOE UNIT	
DIE SIZE "A"	DIM. "B"
5-7/8" to 6"	8"
6-1/8" to 7"	9"
7-1/8" to 8"	10"



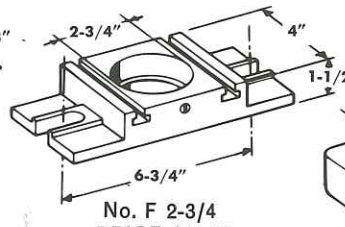
DIE SHOES



No. 203
PRICE $7.50
WEIGHT 3 LBS.

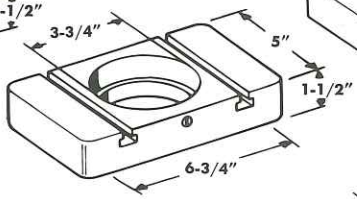


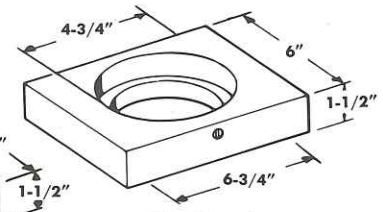
No. 118—2-3/4
PRICE $12.50
WEIGHT 5 LBS.



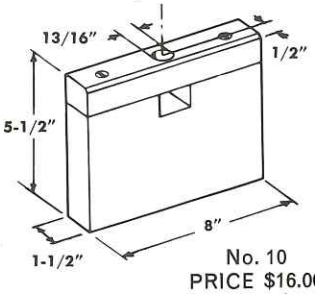
No. F 2-3/4
PRICE $12.50
WEIGHT 8 LBS.

No. F 3-3/4
PRICE $22.00
WEIGHT 13 LBS.

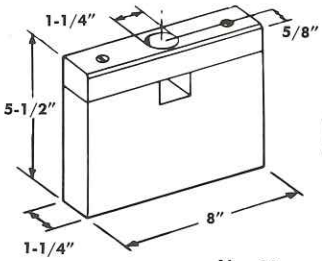




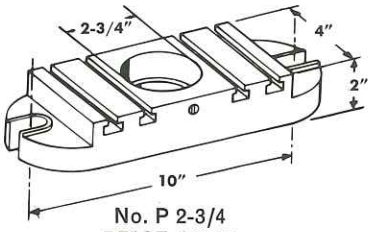
No. F 4-3/4
PRICE $30.00
WEIGHT 14 LBS.



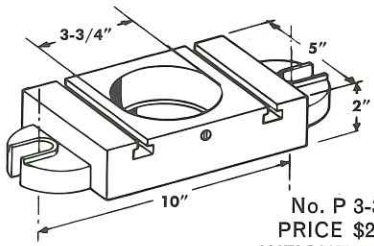
No. 10
PRICE $16.00
WEIGHT 17 LBS.



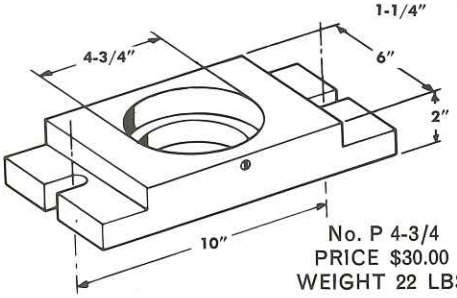
No. 20
PRICE $16.00
WEIGHT 17 LBS.



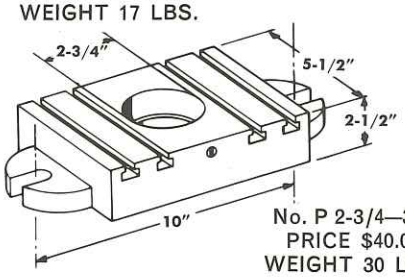
No. P 2-3/4
PRICE $16.50
WEIGHT 17 LBS.



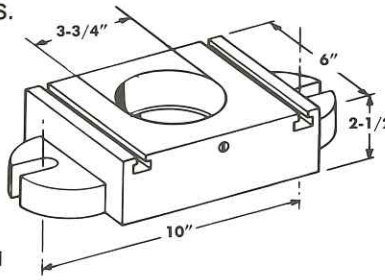
No. P 3-3/4
PRICE $22.00
WEIGHT 20 LBS.



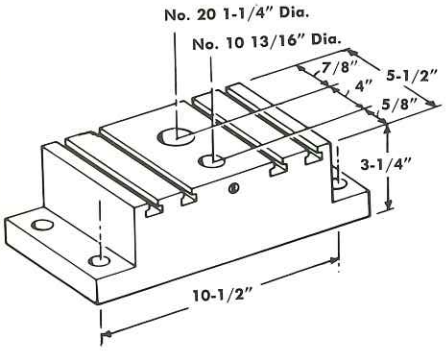
No. P 4-3/4
PRICE $30.00
WEIGHT 22 LBS.



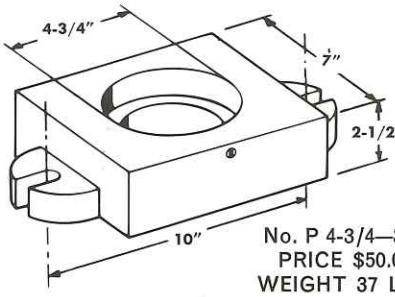
No. P 2-3/4—331
PRICE $40.00
WEIGHT 30 LBS.



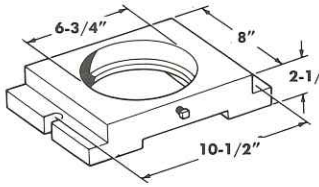
No. P 3-3/4—331
PRICE $45.00
WEIGHT 30 LBS.



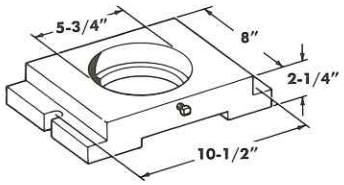
COMB. No. 10 & No. 20 —331
OFFSET DIE SHOE
PRICE $50.00
WEIGHT 33 LBS.



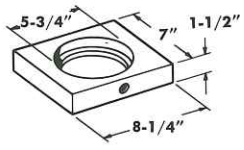
No. P 4-3/4—331
PRICE $50.00
WEIGHT 37 LBS.



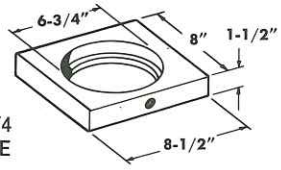
No. P 6-3/4
DIE SHOE
$70.00
WEIGHT 30 LBS.



No. P 5-3/4
DIE SHOE
$55.00
WEIGHT 35 LBS.

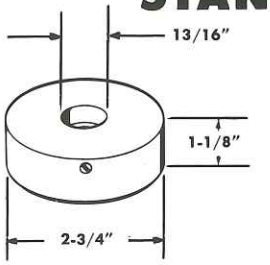


No. F 5-3/4
DIE SHOE
$55.00
WEIGHT 16 LBS.

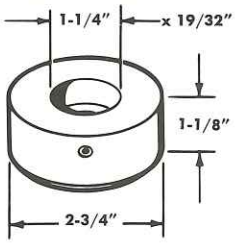


No. F 6-3/4
DIE SHOE
$70.00
WEIGHT 16 LBS.

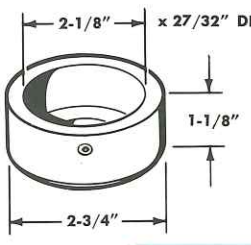
STANDARD DIE ADAPTORS



No. 10
PRICE $5.00

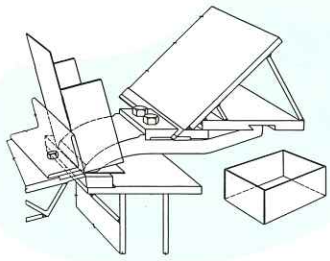


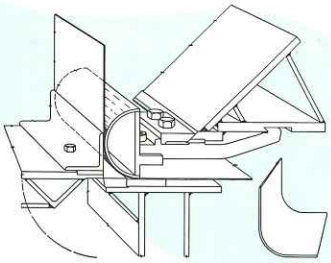
No. 20
PRICE $5.00



No. 40
PRICE $5.00

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE



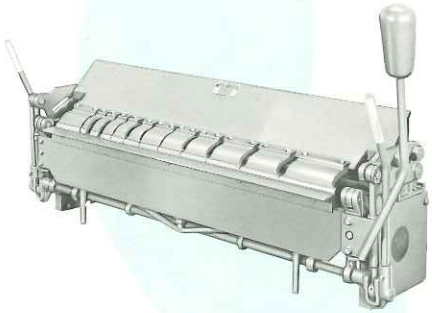


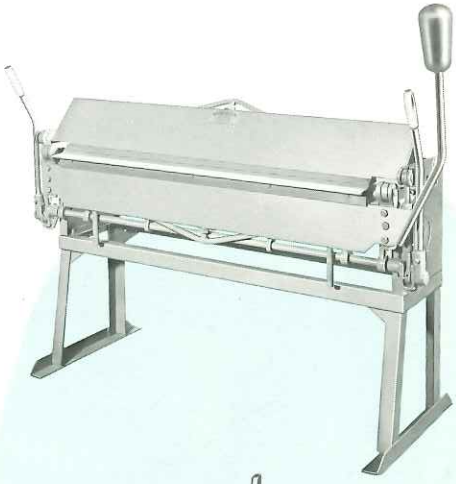
ON THE
FOLLOWING PAGES

WHITNEY-JENSEN

BENDING BRAKES

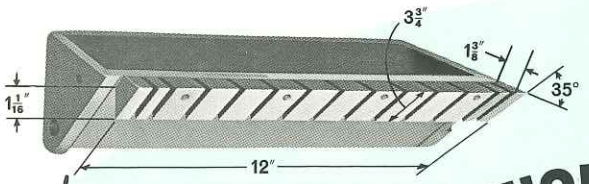
BOX AND PAN
STRAIGHT BENDING
RADIUS BENDING



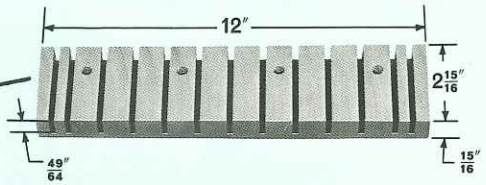


No. 99 LETTER FORMING BRAKE

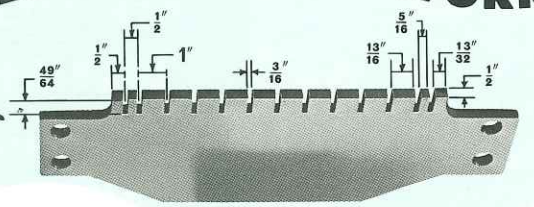
PORTABLE

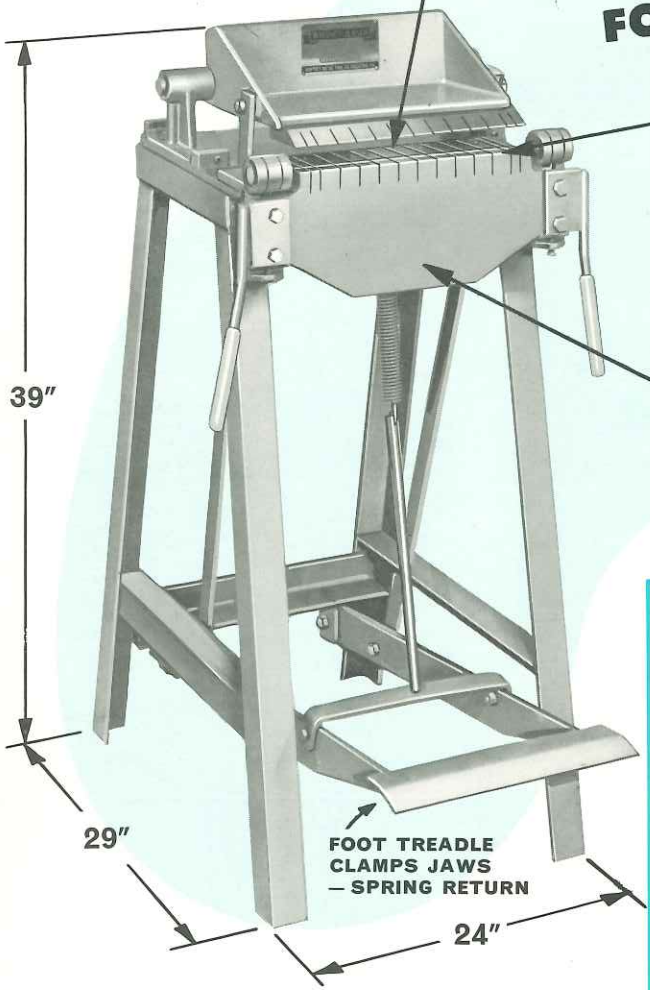


FOR SIGN SHOPS



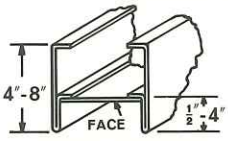
SPEEDS DIFFICULT WORK



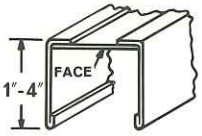


This unique small Bending Brake, with its slotted jaws and apron, provides the means for speed and economy in a number of awkward metal-working operations. It is specially designed for bending up sheet metal strips on which one or more bent-up edges or seams have already been formed. A typical example is the forming of "drum return" used on metal sign letters. The upper jaw is in the form of an open box, to provide adequate stiffness yet remove sufficient superstructure so that the strip undergoing a series of folds can be laid back closely over the top of the machine. The Brake can be moved easily around a shop to the most convenient position for any job, and is also light enough to be trucked out to an installation location if desired.

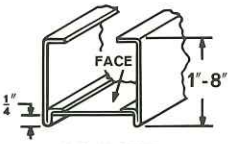
THREE TYPES OF DRUM RETURN FORMED ON No. 99 LETTER FORMING BRAKE



CHANNEL BLOCK TYPE
(WITH RACEWAY FOR WIRING, TRANSFORMER, ETC.)

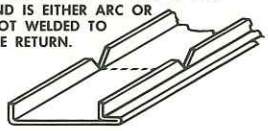


CHANNEL TYPE
(NEON OR INCANDESCENT PROTECTED TYPE)



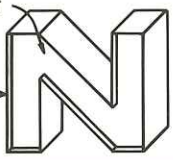
BLOCK TYPE
(USED PLAIN OR ILLUMINATED)

DRUM RETURN VARIES IN THICKNESS FROM 24 GA. THRU 18 GA. FACE IS USUALLY 14 GA. AND IS EITHER ARC OR SPOT WELDED TO THE RETURN.



FACE OF LETTER CUT OUT FIRST

DRUM RETURN IS FORMED IN SUITABLE LENGTH ON LARGE BRAKE, NOTCHED, AND THEN FORMED ON No. 99 LETTER FORMING BRAKE.



SPECIFICATIONS

Capacity, Mild Steel	20 ga.
Bending Length, Maximum	12″
Slot Dimensions (Widths)	See Above
Slot Depths	¾″
Maximum Opening between Jaws	1½″
Floor Space Required	24″ x 29″
Height Overall	39″
Weight	185 lbs.

NET PRICE — F. O. B. FACTORY

No. 99 Letter Forming Brake	$200.00

20 GA. UNIVERSAL BENDING BRAKE

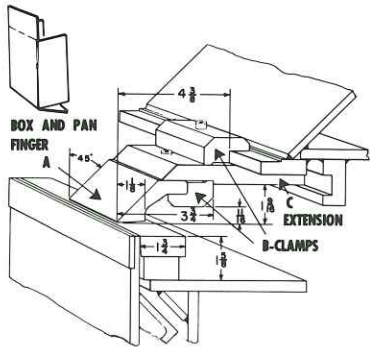
ROLLER BEARING

RADIUS BENDING

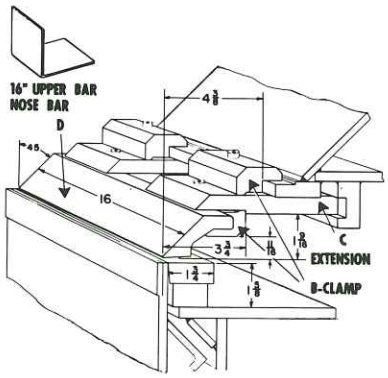
STRAIGHT BENDING

BOX AND PAN

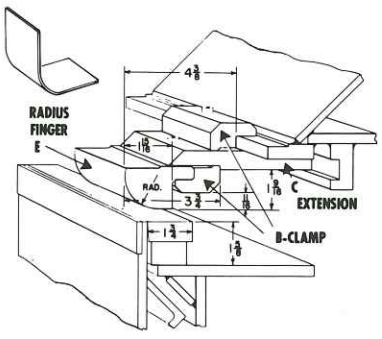
The 20 ga. Universal Bending Brake will be found very useful in model shops and where metal forming is of a varying nature. Straight bending, box and pan bending, and radius bending may be all accomplished on one setting of the brake. Straight bending, box and pan fingers, and radius fingers may be quickly and easily changed. Box and pan fingers, 16″ upper beam nose bar, and radius fingers may be purchased as needed; normally additional clamps or extensions are not required. Available in either bench or floor models.



BOX AND PAN FINGER



16″ UPPER BEAM NOSE BAR



RADIUS FINGER

SPECIFICATIONS

Capacity, Mild Steel	48″ of 20 ga.
Length Overall	68″
Height Overall	55″
Width Overall	25″
Maximum Depth, Box and Pan Finger (A)	4⅜″
Maximum Depth, 16″ Upper Beam Nose Bar (D)	4⅜″
Maximum Depth, Radius Finger (E)	4⅜″
Widths of Box and Pan Fingers	1″, 1½″, 2″, 2½″, 3″, 3½″, 4″, 4½″, 5″, 5½″, 6″
Width of Radius Finger (E)	4″
Radii of Radius Fingers (E) Available, 4″ width ONLY	¼″, ½″, ¾″, 1″, 1¼″
Weight of Box and Pan Fingers (A), per Lineal Inch	7 oz.
Weight of Extensions (C) and Clamps (B), per Lineal Inch	1 lb. 9 oz.
Weight of 16″ Upper Beam Nose Bar (D)	8 lbs.
Weight of Radius Fingers (E)	3 lbs. 8 oz.
Shipping Weight, Bench Model 20 ga. Universal Brake	578 lbs.
Shipping Weight, Floor Model 20 ga. Universal Brake	668 lbs.

NET PRICES — F.O.B. FACTORY

20 ga. Universal Bench Model Brake with Standard Equipment	$575.00
20 ga. Universal Floor Model Brake with Standard Equipment	600.00
Box and Pan Finger (A), per Lineal Inch	1.75
Clamp (B), per Lineal Inch	1.75
Extension (C), per Lineal Inch	3.50
16″ Upper Beam Nose Bar (D)	28.00
Radius Finger (E) Any Radius Listed Above, 4″ width ONLY	7.00

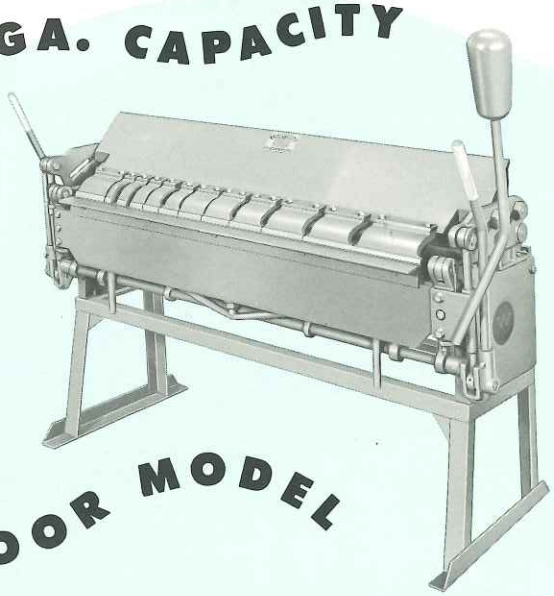
Standard Equipment includes: two 16″ length Upper Beam Nose Bars, and one each Box and Pan Fingers 1-1/2″, 2″, 3″, 4″, 6″ widths.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

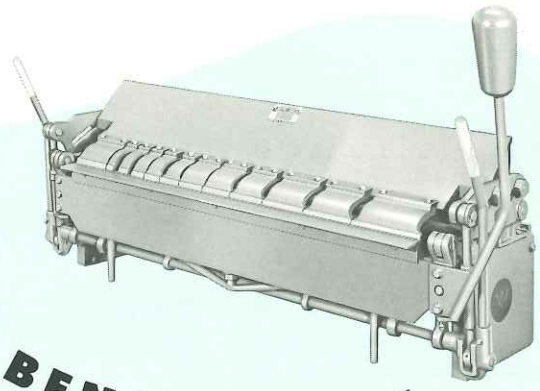
20 GA. BOX FINGER BRAKE

BOX & PAN OR STRAIGHT BENDING

20 GA. CAPACITY



FLOOR MODEL



BENCH MODEL

The Whitney-Jensen "20 ga. Box Finger Brake" is made for straight bending or box and pan bending. Is available in bench or floor model. The 20 ga. Box Finger Brake can be converted to box and pan work by the attachment of box fingers to the upper beam. Box and pan fingers have a maximum depth of 4" and various widths are available. Roller bearings at the hinge points, plus a counterweight, aid in reducing manual effort. 20 ga. Box Finger Brake will form a ½" flange in 20 ga. mild steel it's entire length.

Removal of the apron angle iron work support reduces the brake capacity by two gauges. Removal of both apron angle iron work support and apron filler plate reduces the brake capacity by four gauges. When apron angle iron work support and apron filler plate are removed, 3/16" reverse bends may be made.

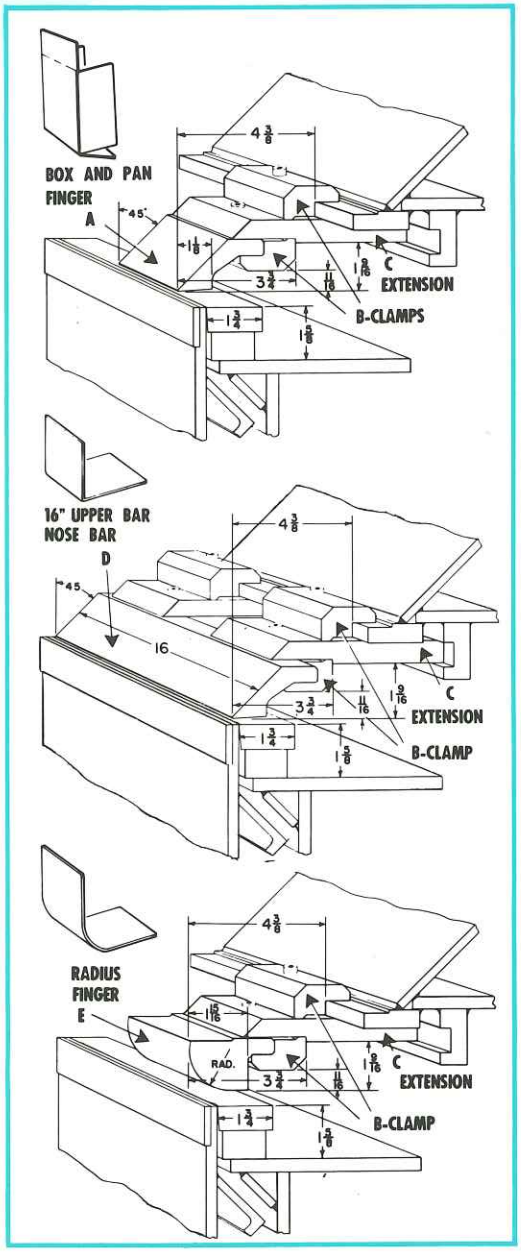
SPECIFICATIONS

	Bench Model Box Finger Type	Floor Model Box Finger Type
Capacity, Mild Steel	20 ga.	20 ga.
Maximum Working Length	49"	49"
Maximum Opening Between Jaws	1⅝"	1⅝"
Length Overall	68"	68"
Height Overall	35½"	55"
Width Overall	20"	25"
Weight	600 lbs.	685 lbs.
Maximum Depth of Box and Pan Fingers		4"
Widths of Box and Pan Fingers 1", 1½", 2", 2½", 3", 3½", 4", 4½", 5", 5½", 6", 8"		
Weight of Box and Pan Fingers, per Lineal Inch		1¾ lbs.

NET PRICES — F.O.B. FACTORY

Bench Model Brake	$475.00
Floor Model Brake	500.00
Box and Pan Fingers, Total Quantity* 2" thru 13", per Lineal Inch	3.30
Box and Pan Fingers, Total Quantity* 14" thru 25", per Lineal Inch	3.00
Box and Pan Fingers, Total Quantity* 26" thru 49", per Lineal Inch	2.75

***NOTE:** 1" and 1½" width Box Fingers are each figured as a 2" width Box Finger. To determine Box Finger cost, follow this example: Box Fingers desired, one each of the following widths: 1½", 3", 5½", 6". These total 16½ lineal inches. (Each 1" or 1½" Box Finger counts as 2" in figuring total lineal inches.) 16½ lineal inches falls in the 14" thru 25" quantity, therefore multiply 16½" by $3.00 which gives a net F.O.B. Factory price of $49.50.



PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

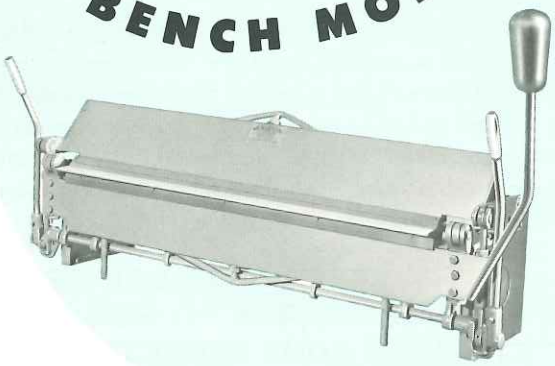
AIR CONDITIONING STRAIGHT BENDING BRAKE
FOR STRAIGHT BENDING ONLY

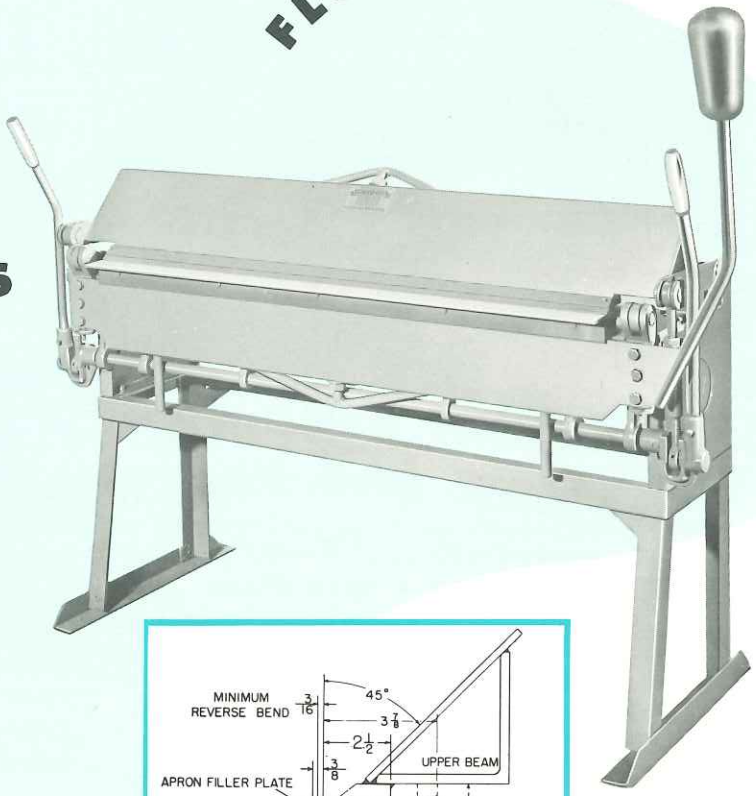
20 GA. x 49 IN. CAPACITY

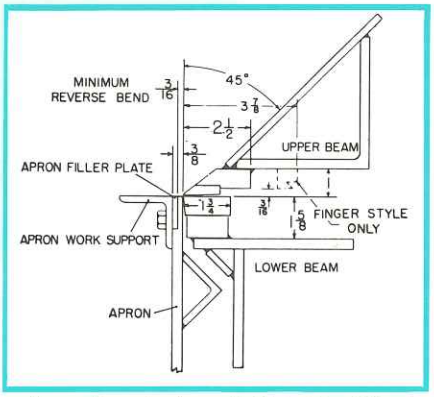
FLOOR MODEL

ROLLER BEARINGS

BENCH MODEL







Cross-section of end view of "Air Conditioning 20 ga. Box Finger Brake," showing difference between straight bending only type, and the combination straight bending and box finger type.

The Whitney-Jensen "Air Conditioning Straight Bending Brake" is made for straight bending only available in bench or floor model. The straight bending type cannot be converted to box and pan work. Roller bearings at the hinge points, plus a counterweight, aid in reducing manual effort. Air Conditioning Straight Bending Brake will form a ½" flange in 20 ga. mild steel it's entire length.

Removal of the apron angle iron work support reduces the brake capacity by two gauges. Removal of both apron angle iron work support and apron filler plate reduces the brake capacity by four gauges. When apron angle iron work support and apron filler plate are removed, 3/16" reverse bends may be made.

SPECIFICATIONS

	Bench Model Straight Bending	Floor Model Straight Bending
Capacity, Mild Steel	20 ga.	20 ga.
Maximum Working Length	49"	49"
Maximum Opening Between Jaws	1⅝"	1⅝"
Length Overall	68"	68"
Height Overall	35½"	55"
Width Overall	20"	25"
Weight	480 lbs.	565 lbs.

NET PRICES — F.O.B. FACTORY

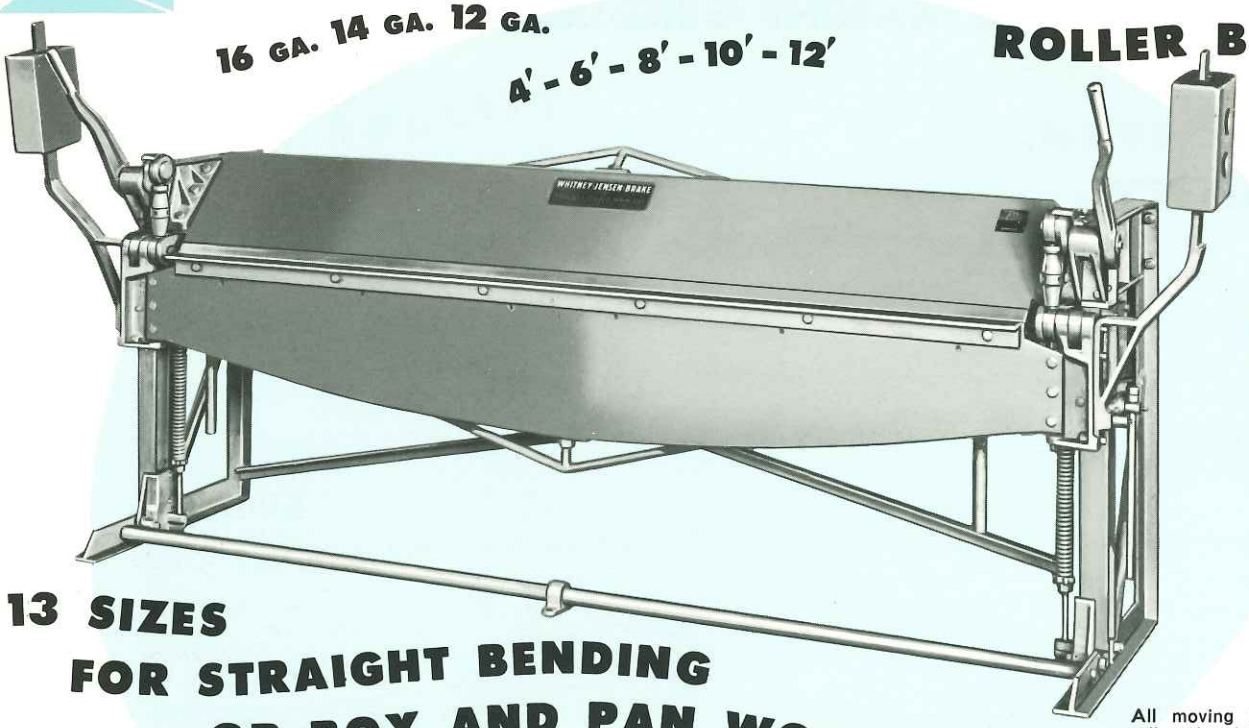
Air Conditioning Straight Bending Brake — Bench Model	$415.00
Air Conditioning Straight Bending Brake — Floor Model	440.00

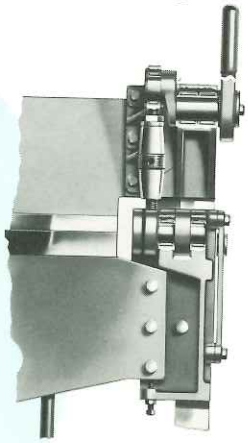
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

16 GA. 14 GA. 12 GA.

4' - 6' - 8' - 10' - 12'

ROLLER BEARING





All moving parts rotate in roller bearings to reduce wear, and to make bending and clamping easier.

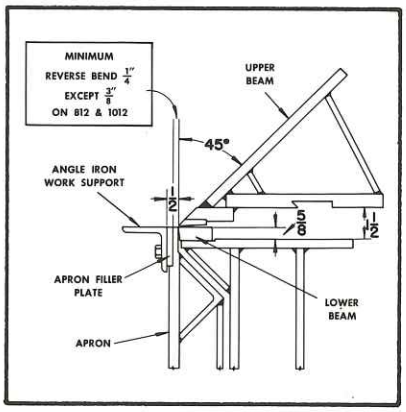
13 SIZES FOR STRAIGHT BENDING OR BOX AND PAN WORK

"POWER" BENDING WITH A HAND BRAKE

To eliminate manual effort and make an operation normally requiring several steps into a single operation — mount an electric hoist above the brake and attach the hook at point "A." A half-ton hoist will "power" all sizes of brakes with the exception of a 10' 14 ga., 8' 12 ga., or 10' 12 ga., all of which require a one ton hoist.

The Whitney-Jensen Combination Roller Bearing Bending Brakes represent a modern departure from the old conventional hand brake design. They are not limited to straight bending and box and pan work alone, but will accommodate inside bending, radius forming, and many other intricate forming operations with special attachments. They are limited in versatility only by the operator's ingenuity.

HEAVY DUTY SPRINGS REDUCE CLAMPING EFFORT . . . ADJUSTABLE COUNTERWEIGHTS REDUCE BENDING EFFORT



The upper jaw remains in a fixed position with relation to the vertical motion, while the lower jaw moves in a true vertical line, thereby insuring more accurate clamping. The upper jaw may be moved directly to the rear either 6 or 8 inches, thereby accommodating box fingers and special forming attachments. The normal maximum opening between the jaws is 1¾ inches, and may be increased to 4 inches to accept box and pan fingers.

All hinge point friction is reduced to a minimum by roller bearings. When box fingers are used, brake capacity is reduced 2 gauges over the fingers.

REVERSE BENDS CAN BE EASILY MADE . . . BUT WITH SOME REDUCTION OF NORMAL CAPACITIES

When the apron angle iron work support is removed, Brake capacity is reduced by 2 gauges.

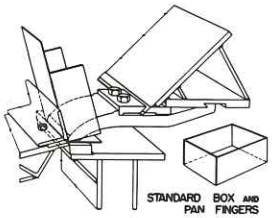
When the apron angle iron work support and apron filler plate are removed, Brake capacity is reduced by 4 gauges. When the apron angle iron work support and apron filler plate are removed, ¼" reverse bends may be made.

These Brakes will form a 1" flange in their rated capacity, their entire length.

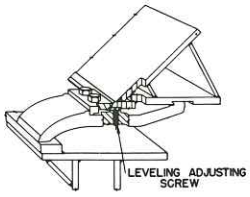
On 8-ft. and 10-ft. 12-ga. Brakes only, when the apron angle iron work support and filler plate are removed, ⅜" reverse bends may be made.

ON STAINLESS STEEL THE CAPACITY OF THE BRAKE IS REDUCED 4 GAUGES

BOX FINGERS



This illustration of the box finger assembly shows the quick and easy method of attachment. The forming of boxes is only one of several uses that may be made of Standard Box and Pan Fingers.



The leveling adjusting screws are used to align the box fingers after they have been attached to the brake. This feature assures a true working surface when bending stainless steel and metals of a light gauge.

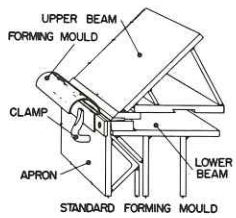
SPECIFICATIONS

Maximum Depth	6″ or 8″
Available Widths	1″, 1½″, 2″, 2½″, 3″, 3½″, 4″, 4½″, 5″, 5½″, 6″, 8″
Weight of 6″ Depth Box Finger	4 lbs. per lineal inch
Weight of 8″ Depth Box Finger	4¼ lbs. per lineal inch

NET PRICES — F.O.B. FACTORY

Total Lineal Inches	6″ Depth Box Finger	8″ Depth Box Finger
2″ thru 13″	$4.00 per lineal inch	$5.50 per lineal inch
14″ thru 25″	3.50 per lineal inch	5.00 per lineal inch
26″ thru 47″	3.25 per lineal inch	4.50 per lineal inch
48″ or more	3.00 per lineal inch	4.00 per lineal inch

NOTE — 1″ and 1½″ width Box Fingers are each figured as a 2″ width Box Finger. To determine Box Finger cost, follow this example: Box Fingers desired, one each of the following widths, 6 inch depth — 1½″, 2½″, 3″, 3½″, 4″, 4½″, 5″, 5½″, 6″. These total 36 lineal inches. (Each 1″ or 1½″ Box Finger counts as 2″ in figuring total lineal inches) 36 lineal inches falls in the 26″ thru 47″ quantity, therefore multiply 36″ by $3.25 which gives a net F.O.B. Factory price of $117.00.

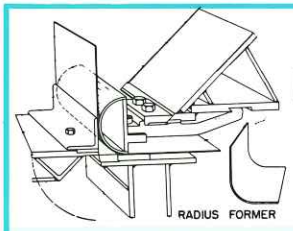


TINNER'S MOULDS

Standard Tinner's Moulds — one set consisting of five standard sizes: ⅝″, 1″, 1⅛″, 2¼″, and 3″ — are available for all sizes of Brakes except the "Air Conditioning Special" and the 48″ Special Universal models.

NET PRICES — F.O.B. FACTORY

Sold Only in Sets	Brake Lengths 4-ft.	6-ft.	8-ft.	10-ft.	12-ft.
Price per Set — ⅝″, 1″, 1⅛″, 2¼″, 3″	$60.00	$70.00	$75.00	$80.00	$85.00
Weight per Set	25 lbs.	38 lbs.	52 lbs.	65 lbs.	78 lbs.



RADIUS FORMER BARS

Radius Former Bars are available for all Combination Roller Bearing Brakes. The maximum size of this type of Former Bar is 2½″ radius.

NET PRICES — F.O.B. FACTORY

Brake Lengths	4-ft.	6-ft.	8-ft.	10-ft.	12-ft.
Radius Bars — 3/32″ to 1″ by 1/32″, each size	$60.00	$90.00	$120.00	$150.00	$180.00
Radius Bars — 1″, 1½″, 2″, 2½″, each size	$48.00	$72.00	$ 96.00	$120.00	$144.00
Holder Fingers — Price $16.50 each	$49.50 for 3*	$66.00 for 4*	$ 82.50 for 5*	$ 99.00 for 6*	$132.00 for 8*

NOTE — * Number of Holder Fingers required. Holder Fingers are all alike for all Brake Lengths. Be sure enough Fingers are used for the length of Radius Bar being attached. Shorter Radius Bars may be installed on longer Brakes if desired.

SPECIFICATIONS — NET PRICES — F.O.B. FACTORY

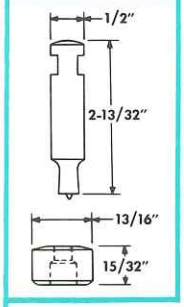
SIZE	CAPACITY	MAXIMUM WORKING LENGTH	OVERALL LENGTH	OVERALL WIDTH	OVERALL HEIGHT	WEIGHT	NET PRICE F.O.B. FACTORY
416	16 ga. mild steel	49″	82″	40″	58″	1400 lbs.	$ 750.00
616	16 ga. mild steel	73″	104″	40″	58″	1830 lbs.	875.00
816	16 ga. mild steel	97″	133″	43″	60″	2160 lbs.	1,150.00
1016	16 ga. mild steel	121″	159″	43″	65″	3345 lbs.	1,275.00
414	14 ga. mild steel	49″	82″	40″	58″	1460 lbs.	780.00
614	14 ga. mild steel	73″	109″	43″	60″	2165 lbs.	950.00
814	14 ga. mild steel	97″	133″	43″	60″	2770 lbs.	1,200.00
1014	14 ga. mild steel	121″	159″	43″	65″	3700 lbs.	1,350.00
1214	14 ga. mild steel	144″	195″	46″	67″	5770 lbs.	2,350.00
412	12 ga. mild steel	49″	85″	43″	60″	1665 lbs.	880.00
612	12 ga. mild steel	73″	109″	43″	60″	2280 lbs.	1,050.00
812	12 ga. mild steel	97″	143″	46″	67″	3850 lbs.	1,675.00
1012	12 ga. mild steel	121″	167″	46″	67″	5040 lbs.	1,900.00

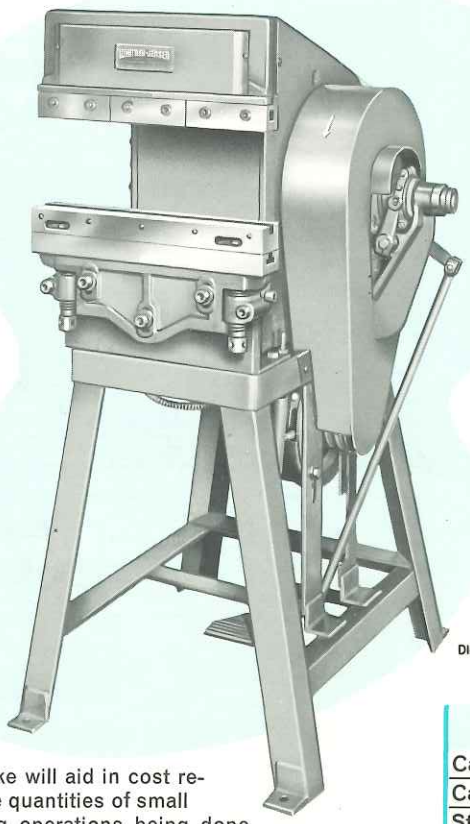
Above brakes furnished less Box Fingers. If Box Fingers are wanted, please specify depth, width, and quantity from list above.

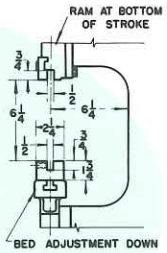
WHITNEY No. 247 18-INCH PRESS BRAKE JENSEN

STANDARD ROUND No. 8 PUNCHES AND No. 10 FLAT TOP DIES

3/32″	5/16″
7/64″	21/64″
1/8″	11/32″
9/64″	23/64″
5/32″	3/8″
11/64″	25/64″
3/16″	13/32″
13/64″	27/64″
7/32″	7/16″
15/64″	29/64″
1/4″	15/32″
17/64″	31/64″
9/32″	1/2″
19/64″	



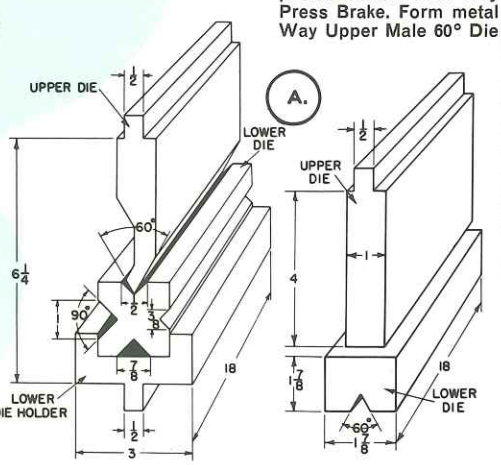




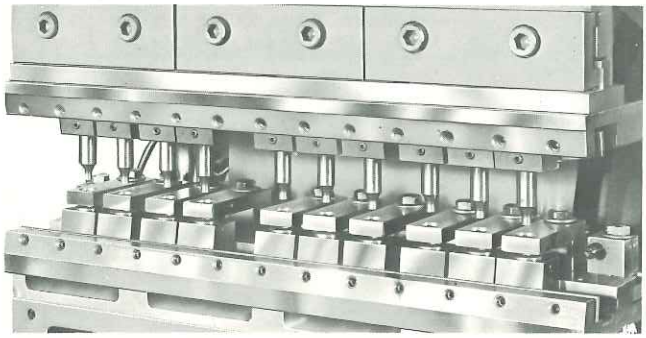
A. The Four-Way 90° V-Die Set with Holder is used to form metal to 90°. Four different widths of 90° groove in Lower Die are obtained by changing position of Lower Die in Lower Die Holder.

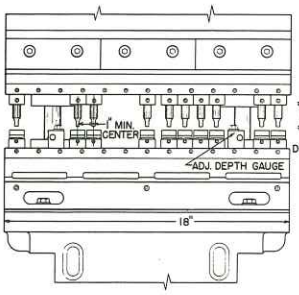
B. The Flattening and Forming Dies Set is used as follows: Place Flattening and Forming Lower Die in Lower Die Holder with 60° groove in up position. Place Four-Way Upper Male 60° Die in Press Brake. Form metal to 60°. Replace Four-Way Upper Male 60° Die with Flattening Upper Die in Press Brake. Turn Flattening and Forming Lower Die so that 60° groove is in down position and proceed with flattening operation.

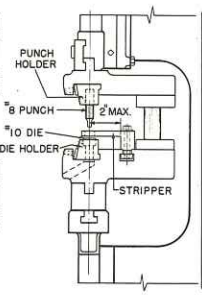
Always make proper die bed adjustment for each operation.



The No. 247 Press Brake will aid in cost reduction where there are quantities of small formings and punching operations being done on large presses. The frame is of welded steel construction, workmanship of the highest quality, the operation simple, and maintenance reduced to a minimum.







No. 742-CU COMPLETE UNIT

Consists of No. 742 Die Set, 14 Punch Holders, 14 Strippers, 2 Back Gauges, and 14 Punches and Dies (your selection of sizes from list above).

$526.30 F.O.B. Factory

The No. 742 Adjustable Multiple-Punch Unit, shown above, is available as a Complete Unit, as described in the box at the right of the drawing, for $526.30 F.O.B. Factory. Various parts of the Unit can be ordered separately, as shown in the Price List at the right. The maximum number of Punch Holders, Die Holders, and Strippers that the Die Set will accommodate is 14, all on 1″ (minimum) centers. The pictures show set-ups of 10, but spaced out. Standard Round No. 8 Punches and No. 10 Flat Top Dies from 3/32″ to 1/2″ size are available, as shown in the list above.

SPECIFICATIONS

Capacity Forming	14 ga. mild steel over 1/8″ 90° V-Die or 4½ Tons
Capacity Punching	Sixteen 3/16″ holes thru 20 ga. mild steel
Strokes Per Minute	47
Depth of Throat	6¼″
Height of Throat	11½″
Length of Stroke	1″
Adjustment of Die Bed	1″
Length of Die Bed	18″
Die Space, Lower Beam Adjusted Down	6¼″
Floor Space	38″ x 28″
Clutch	Dry Disc Single Plate
Motor	1 HP, 3 PH, 1800 RPM, 220-440V
Drive	2 V-Belts
Weight, No. 247 Press Brake *	860 lbs.
Weight, Four Way 90° V-Die with Holder *	50 lbs.
Weight, No. 742-CU Complete Unit *	80 lbs.

NET PRICES — F. O. B. FACTORY

No. 247 Press Brake without Motor *	$875.00
No. 247 Press Brake with Standard Motor (see above)*	925.00
No. 247 Press Brake with 1 HP, 3 PH, 550V Motor *	925.00
No. 742 Die Set, Basic Component	235.00
No. 742-1 Punch Holder, each	6.00
No. 742-2 Die Holder, each	6.00
No. 742-3 Stripper, each	6.00
No. 742-4 Back Gauge, Set of 2 ($6.00 each)	12.00
No. 8 Standard Round Punch (Size List above left)	1.10
No. 10 Flat Top Round Die (Size List above left)	.85
Four-Way 90° V-Die with Holder *(3 Pcs. Set)	150.00
Four-Way Upper Male 60° Die Only	55.00
Four-Way Lower 90° Die Only	55.00
Four-Way Lower Die Holder Only	40.00
Flattening and Forming Dies (2 Pcs. Set)	65.00
Flattening Upper Die Only	30.00
Flattening and Forming Lower Die Only	35.00

* The weight and price of the No. 247 Press Brake does not include the Four-Way V-Die with Holder, or the No. 742-CU Multiple-Punch Unit.

Machines purchased less motor will be equipped with the following: Switch (state phase and voltage desired), Belts, Motor Mounting, Guard, Sheave.

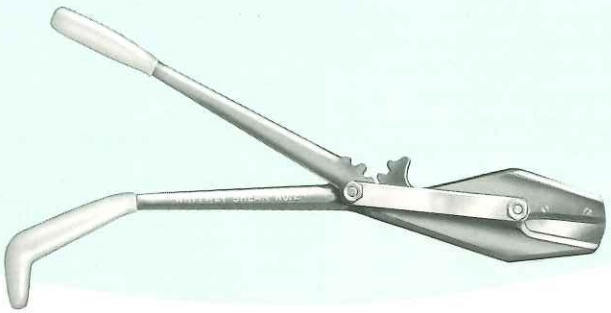
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

ON THE
FOLLOWING PAGES

WHITNEY-JENSEN

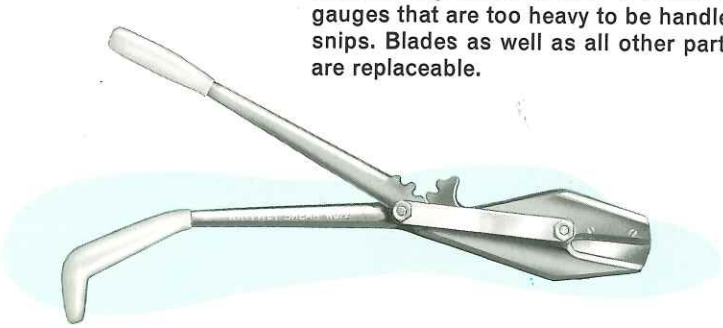
SHEARS & NOTCHERS

HAND TOOLS
POWER TOOLS



No. 2 SHEAR

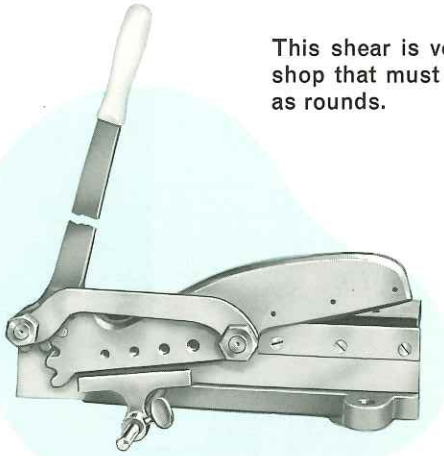
The No. 2 Shear is very useful in any sheet metal shop as a stock shear, for shearing sheets too large to be conveniently handled with a bench shear, and for gauges that are too heavy to be handled with tinner's snips. Blades as well as all other parts of this shear are replaceable.



SPECIFICATIONS	
Capacity, Mild Steel	1/8"
Length Overall	26½"
Length of Shear Blades	3½"
Weight	13¼ lbs.
NET PRICES — F. O. B. FACTORY	
No. 2 Shear Complete	$38.50
Moveable Shear Blade, for replacement	2.50
Lower Shear Blade, for replacement	2.50

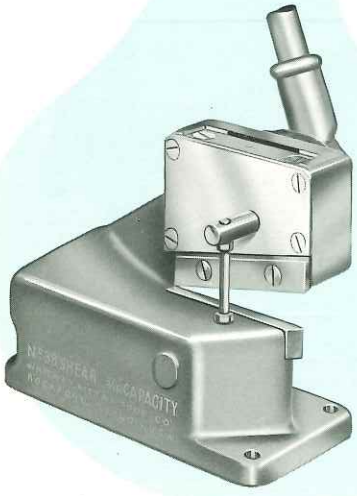
SPECIFICATIONS	
Capacity, Mild Steel	1/8"
Capacity, Stainless Steel (Use Hi-Speed Blade)	3/32"
Capacity, Mild Steel or Stainless Steel, Rounds	1/8", 3/16", 1/4", 5/16"
Length Overall	16"
Height Overall (not including Handle)	6"
Width Overall	6"
Length of Blades	5"
Length of Operating Handle	16"
Weight, with Gauge	24 lbs.
NET PRICES — F. O. B. FACTORY	
No. 3 Bench Shear with Carbon Steel Blades	$50.00
No. 3 Bench Shear with Hi-Speed Blades	59.00
Upper Carbon Steel Blade, for replacement	3.00
Lower Carbon Steel Blade, for replacement	3.00
Upper Hi-Speed Blade, for replacement	7.50
Lower Hi-Speed Blade, for replacement	7.50
Cutting Dies (State Size Desired), per pair	1.50

No. 3 BENCH SHEAR



This shear is very useful in the shop that must cut flats as well as rounds.

No. 38 THROATLESS BENCH SHEAR



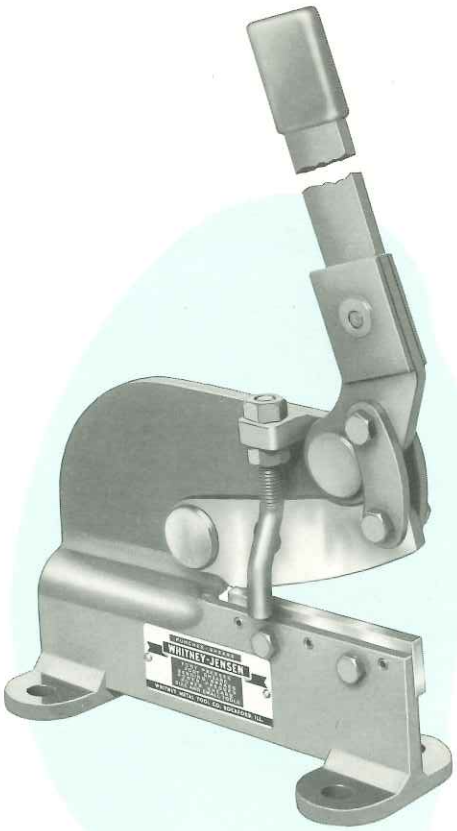
The No. 38 Throatless Bench Shear will split or shear sheets or flats of any dimension right up to capacity. The crank turns on roller bearings and the slide is actuated by another roller bearing, thereby reducing friction to a minimum. Compare this Shear with any other on the market as to price, capacity, weight, and workmanship.

The No. 38 Throatless Bench Shear is furnished with 30" operating Handle.

SPECIFICATIONS	
Capacity, Mild Steel	3/16"
Capacity, Stainless (use Hi-Speed Blade)	7/32"
Height of Shear	9"
Length of Shear	11"
Width of Shear	7½"
Length of Shear Blades	5"
Weight with 30" Operating Handle	45 lbs.
NET PRICES — F. O. B. FACTORY	
No. 38 Shear with Carbon Steel Blades	$82.50
No. 38 Shear with Hi-Speed Blades	95.70
Upper Carbon Steel Blade, for replacement	4.40
Lower Carbon Steel Blade, for replacement	4.40
Upper Hi-Speed Blade, for replacement	11.00
Lower Hi-Speed Blade, for replacement	11.00

No. 39 BENCH SHEAR

The No. 39 Bench Shear is a light-weight, inexpensive Bench Shear. Roller bearings at the hinge points ease the shearing operation. The frame is formed from 1/2" plate and the offset shape permits slitting a sheet within capacity. Round mild steel rods may be sheared up to 7/16". The No. 39 Bench Shear is furnished with 30" operating handle.

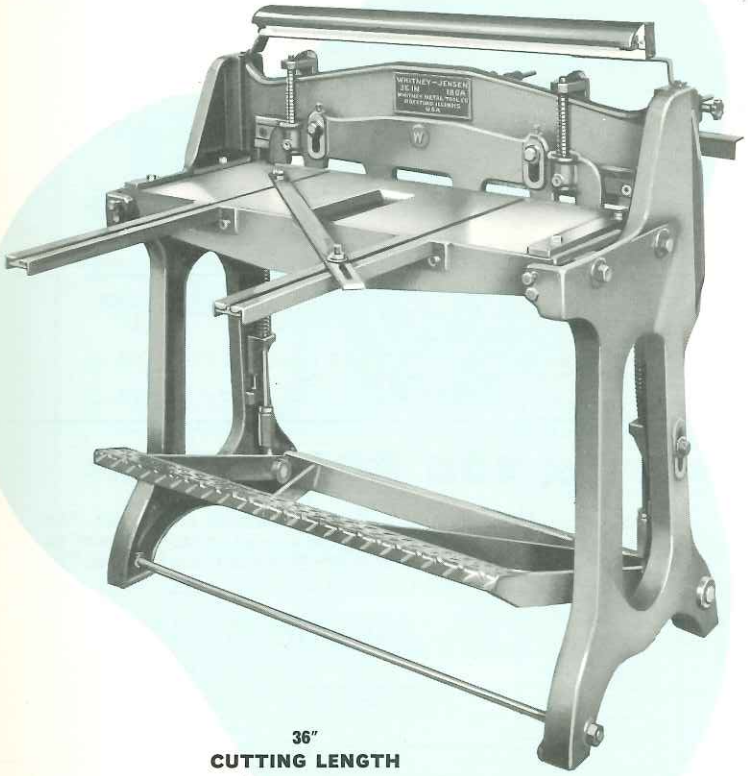


SPECIFICATIONS

	Capacity, Mild Steel
Bars	3/16" x 2"
Flats	10 ga.
Rounds	7/16"
Angle Iron	1/8"
Length of Shear Blades	4 1/16"
Weight with 30" Operating Handle	18 lbs.

NET PRICES — F. O. B. FACTORY

No. 39 Bench Shear with Carbon Steel Blades	$55.00
No. 39 Bench Shear with Hi-Speed Blades	71.50
Upper Carbon Steel Shear Blade, for replacement	11.00
Lower Carbon Steel Shear Blade, for replacement	5.50
Upper Hi-Speed Shear Blade, for replacement	22.00
Lower Hi-Speed Shear Blade, for replacement	11.00
Cutting Die, for replacement	1.90



36" CUTTING LENGTH — CAPACITY 18 GA. MILD STEEL

No. 30 FOOT SQUARING SHEAR

FLUORESCENT LIGHTING

An added feature, optional in a foot-operated Square Shear is the fluorescent light mounted directly over the Blades, which casts a beam of light to aid the operator in shearing to a scribed line.

SPECIFICATIONS

Capacity, Mild Steel	18 ga.
Cutting Length	36"
Length of Shear Blades	37"
Back Gauge Range, Maximum	24"
Front Gauge Range, Maximum	31"
Floor Space, Front to Back (Shear only)	26"
Floor Space, Front to Back (with Back Gauge)	50"
Floor Space, Right to Left	45"
Height (including Fluorescent Light)	46"
Height (less Fluorescent Light)	41 1/2"
Weight	670 lbs.

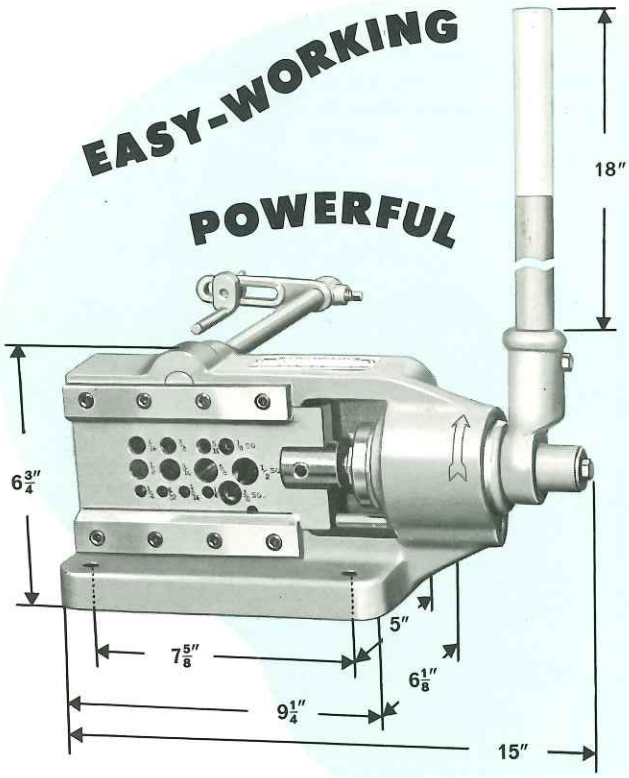
NET PRICES — F. O. B. FACTORY

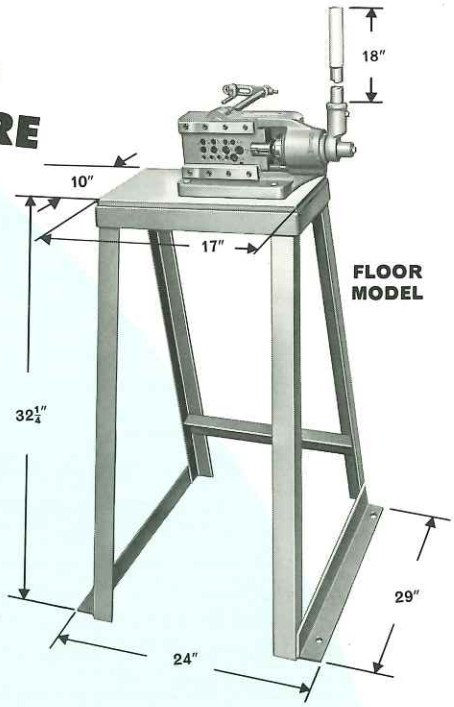
No. 30 Shear, Carbon Steel Blades with Fluorescent Light	$470.00
No. 30 Shear, Carbon Steel Blades, less Fluorescent Light	450.00
No. 30 Carbon Steel Blades, for replacement	110.00
No. 30 High Speed Steel Blades, for replacement	220.00

EASY-WORKING

POWERFUL

WIDE RANGE UP TO 1" ROUND 7/8" SQUARE





A convenient Stand for mounting the No. 21 and No. 22 Rod Shears as per illustration is available.

No. 21, No. 22 ROD CUTTERS

The No. 21 and No. 22 Rod Shears are actuated by a ball bearing screw movement providing a fast, easy-shearing action. All holes are approximately .005" oversize, so that the rod will be sheared with a minimum of distortion.

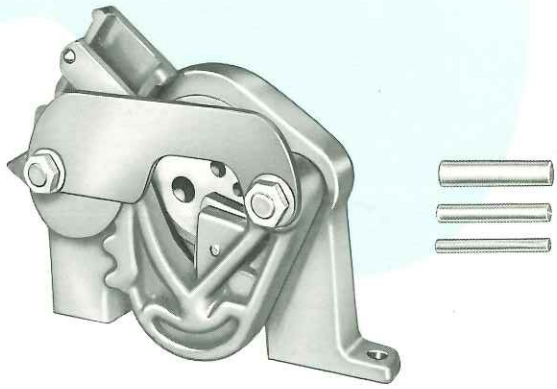
The No. 21 and No. 22 Rod Shears are each equipped with an adjustable gauge. This adjustable gauge has a range from 7/8" to 11" and moves away automatically from the work after shearing is completed.

No. 21 Rod Shear will shear 1/8", 5/32", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8" Round Rods; also 1/4", 3/8", 1/2" Square Rods.
No. 22 Rod Shear will shear 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1" Round Rods; also 5/8", 3/4", 7/8" Square Rods.

A 20" Operating Handle is furnished with No. 21 Rod Shear.
A 54" Operating Handle is furnished with No. 22 Rod Shear.

SPECIFICATIONS

	No. 21	No. 22
Capacity, Mild Steel, Round Rod	5/8"	1"
Capacity, Mild Steel, Square Rod	1/2"	7/8"
Weight, Bench Model	70 lbs.	149 lbs.
Weight, Floor Model	125 lbs.	189 lbs.
NET PRICES — F. O. B. FACTORY		
Bench Model	$242.00	$330.00
Floor Model	269.50	357.50
Movable Die, for replacement	60.50	77.00
Stationary Die, for replacement	60.50	77.00



No. 400 ROD CUTTER

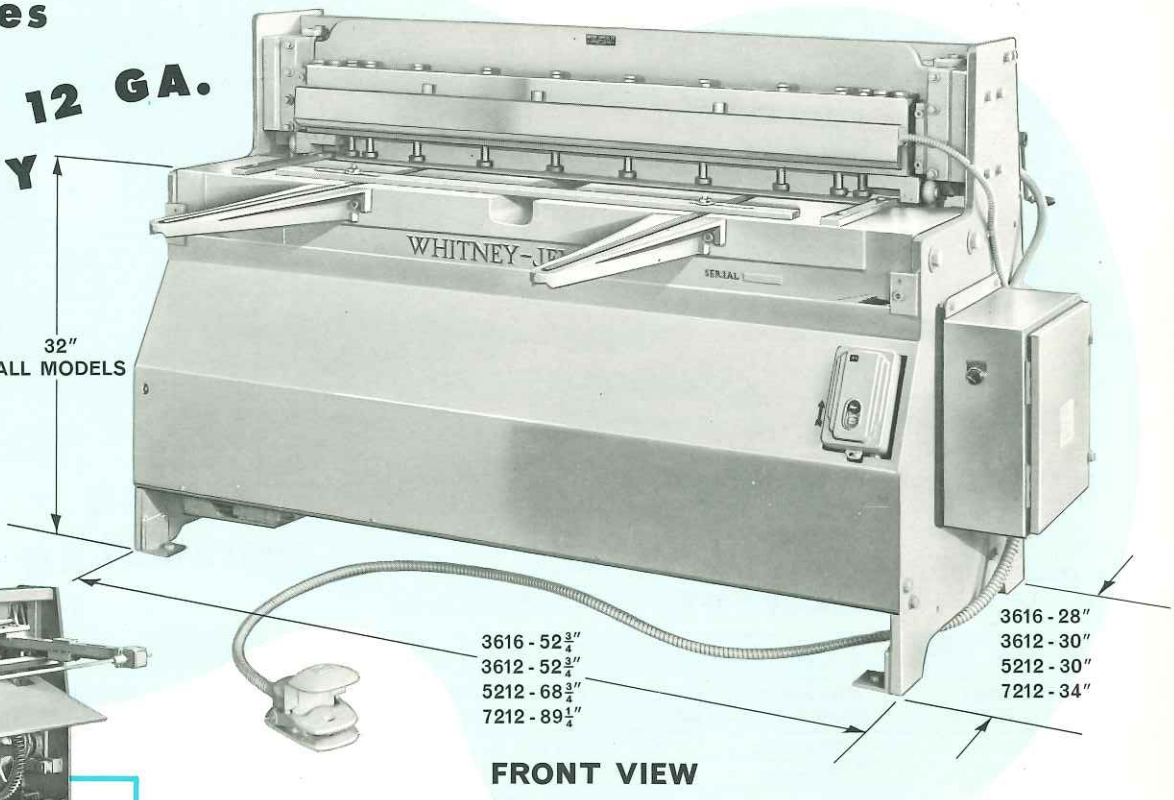
May be used stationary in the shop, or portable on the job. The shear blade and the base shearing die are replaceable, as well as all other parts. Furnished with a 72" Operating Bar Handle. The three hole sizes are 5/16", 17/32", 25/32".

SPECIFICATIONS

Capacity	Reinforcing Bars 1/8" thru 5/8"
Capacity	Rods from 1/8" to 3/4" diameter, mild steel
Height of Cutter	10"
Length of Cutter	13 1/2"
Weight, including 72" Operating Bar Handle	49 lbs.
NET PRICES — F. O. B. FACTORY	
No. 400 Rod Cutter Complete	$66.00
No. 400 Blade, for replacement	6.60
No. 400 Base Shearing Die, for replacement	17.25

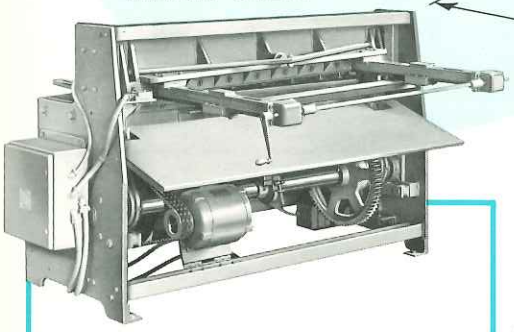
No. 72 Series

16 GA. AND 12 GA. CAPACITY



FRONT VIEW

REAR VIEW



36″, 52″, 72″ SHEARING LENGTHS

- ELECTRICALLY ACTUATED PIN-TYPE CLUTCH
- MICROSWITCH TRIP CONTROL WITH SINGLE STROKE SELECTOR SWITCH
- MOVABLE FOOT SWITCH
- POSITIVE CAM-ACTUATED HOLD DOWN
- NEOPRENE-FACED SELF-COMPENSATING HOLD DOWN PLUNGERS
- LONG LIFE NON-SCORING NYLON GIBS
- ACCURATE CRANK-OPERATED BACK GAUGE
- LIGHT BEAM DIRECTED ON SHEARING LINE
- ALL SHAFTS ON SELF-ALIGNING BEARINGS
- ALL MOVING PARTS GUARDED
- FOUR-EDGE BLADES

CAPACITY OF SHEAR IS REDUCED 2 GAUGES ON STAINLESS STEEL

SPECIFICATIONS

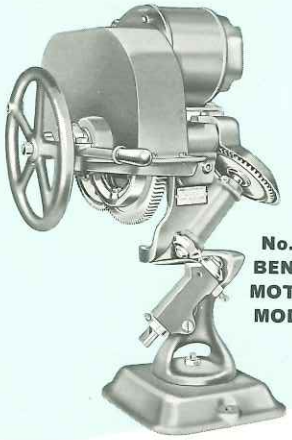
	No. 3616	No. 3612	No. 5212	No. 7212
Capacity, Mild Steel	16 ga.	12 ga.	12 ga.	12 ga.
Shearing Length, Maximum	36″	36″	52″	72″
Strokes per Minute	180	76	76	76
Back Gauge, Maximum Range	24″	24″	24″	24″
Front Gauge, Maximum Range	38″	38″	38″	38″
Height Overall	43″	43″	45″	45″
Floor Space Required, Gauges in Position	61″ x 83″	61″ x 83″	76″ x 83″	88″ x 88″
Standard Motor	2 HP, 3 PH, 1200 RPM, 220-440V		2 HP, 3 PH, 1800 RPM, 220-440V	
Rake of Upper Shear Blade per Foot	11/32″	11/32″	11/32″	11/32″
Clutch, Pin Type	Non-Repeat with Quick Change to Repeat			
Shipping Weight, Power Squaring Shear	2300 lbs.	2800 lbs.	3160 lbs.	4020 lbs.
Shipping Weight of Shear Blades, per Set	50 lbs.	50 lbs.	75 lbs.	100 lbs.
NET PRICES — F.O.B. FACTORY				
Shear less Motor, Carbon Blades	$2250.00	$2660.00	$2925.00	$4250.00
Shear with Standard Motor, Carbon Blades	2300.00	2700.00	3015.00	4350.00
Shear with 3 PH, 550V Motor, Carbon Blades	2300.00	2700.00	3015.00	4350.00
Carbon Blades, Four-Edge, per Set	175.00	175.00	225.00	315.00
Durachrome Blades, Four-Edge, per Set	250.00	250.00	350.00	500.00

Shears purchased less Motor will be equipped with the following: Switch (state phase and voltage desired), Belts, Motor Mounting, Guard, Motor Sheave.

SHEAR STRAIGHT

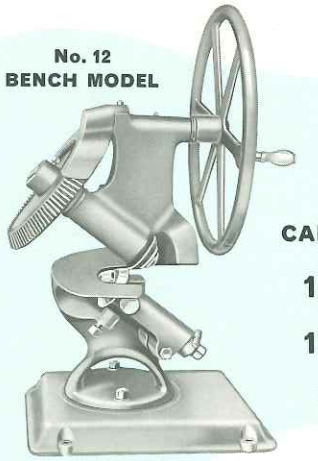
No. 18
BENCH MODEL

SHEAR CIRCULAR



No. 18
BENCH
MOTOR
MODEL

SHEAR IRREGULAR



No. 12
BENCH MODEL

CAPACITIES
FROM
18 GA.
THRU
12 GA.
MILD
STEEL

No. 12
FLOOR MOTOR MODEL

A FRICTION CLUTCH GEAR ALLOWS THE OPERATOR TO STOP THE MACHINE WHILE THE MOTOR IS RUNNING

SPECIFICATIONS and NET PRICES — F. O. B. FACTORY

MODEL NUMBER	CAPACITY MILD STEEL	FLOOR SPACE REQUIRED	MINIMUM RADIUS	SHEARING SPEED	MOTOR REQUIRED*	WEIGHT	NET PRICE
No. 18 Bench Hand	18 gauge	9″x9″	1¾″	9′ per minute	——	45 lbs.	$125.00
No. 18 Bench Motor	18 gauge	9″x9″	1¾″	8′ per minute	¼ HP, 1750 RPM	155 lbs.	275.00
No. 18 Floor Hand	18 gauge	18″x18″	1¾″	9′ per minute	——	100 lbs.	175.00
No. 18 Floor Motor	18 gauge	18″x18″	1¾″	8′ per minute	¼ HP, 1750 RPM	210 lbs.	315.00
No. 12 Bench Hand	12 gauge	24″x24″	4″	8′ per minute	——	285 lbs.	400.00
No. 12 Bench Motor	12 gauge	24″x24″	4″	8′ per minute	½ HP, 1750 RPM	400 lbs.	670.00
No. 12 Floor Hand	12 gauge	24″x24″	4″	8′ per minute	——	405 lbs.	435.00
No. 12 Floor Motor	12 gauge	24″x24″	4″	8′ per minute	½ HP, 1750 RPM	535 lbs.	725.00

†Motors: 1 PH, 110-220V, 60 C.

	REPLACEMENT CUTTERS			RESHARPENING CHARGE		
	18	16	12	18	16	12
Plain Cutter (Lower)	$ 7.50	$10.00	$16.00	$3.50	$4.50	$6.00
Knurled Cutter (Upper)	9.00	12.50	19.00	4.00	5.50	7.00
*Knurled Alloy Steel Cutter (Upper)	12.50	17.50	27.00	5.00	5.50	7.00
Weight of Cutters				4 ozs.	10 ozs.	1 lb. 9 oz.
Original Cutter Size (Plain or Knurled)				2″	2 21/32″	3¾″
Single Cutter May Be Resharpened To (Plain or Knurled)				1¾″	2¼″	3″
Total Upper and Lower Cutters Must Equal (Minimum Diameter)				3¾″	4⅛″	6¾″

EXAMPLE: Using the No. 12 Shear—if one cutter is ground to 3″ diameter, the second cutter must be 3¾″ to equal minimum total diameter of 6¾″. If the 2 cutters do not equal 6¾″ diameter, a new cutter (either upper or lower) may be purchased to give the necessary minimum total diameter.

*For shearing stainless steel, we recommend an alloy steel knurled cutter — the plain cutter remains standard.

THROATLESS PRINCIPLE

As material passes thru the shear, the sheared sections separate going to the right and left and under and over the spiral shaped head.

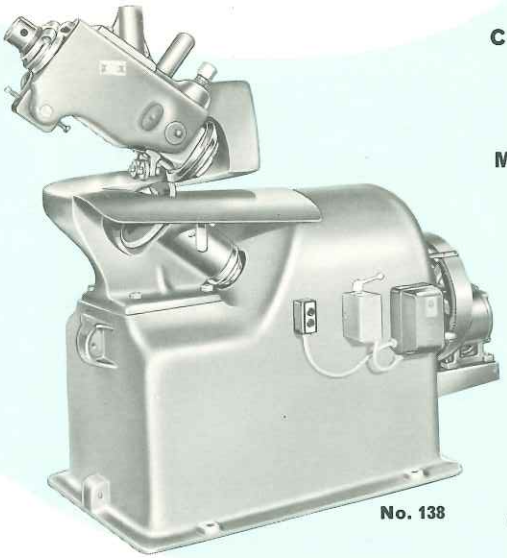
The throatless feature places no limit on the width of the material to be sheared, and straight, irregular or circular patterns can be followed.

The upper cutter is knurled to feed the material and is driven, while the lower cutter is free to revolve in a sleeve.

The cutters are made of high grade tool steel, accurately ground and tempered. Maintenance or replacement cost is low.

SHEAR CIRCULAR

No. 10



No. 138

CAPACITIES
10 GA.
THRU
1/4"
MILD STEEL

No. 114

SHEAR STRAIGHT

SHEAR IRREGULAR

SPECIFICATIONS and NET PRICES — F. O. B. FACTORY

MODEL NUMBER	CAPACITY MILD STEEL	FLOOR SPACE REQUIRED	MINIMUM RADIUS	SHEARING SPEED	MOTOR REQUIRED†	WEIGHT	NET PRICE LESS MOTOR	NET PRICE WITH MOTOR
No. 10 Floor Motor	10 gauge	24"x24"	5"	7' per minute	1 HP, 1750 RPM	785 lbs.	$ 915.00	$ 985.00
No. 114 Floor Motor	¼"	26"x26"	6"	6' per minute	1 HP, 1750 RPM	1090 lbs.	1,325.00	1,400.00
No. 138 Floor Motor	⅜"	32"x42"	9"	6' per minute	3 HP, 1750 RPM	3500 lbs.	3,700.00	3,800.00
No. 112 Floor Motor	½"	32"x50"	10"	6' per minute	7½HP, 1750 RPM	5200 lbs.	4,175.00	4,300.00

Machines intended to be operated by an electric motor — but purchased less motor — will be equipped with the following: Motor bracket, motor pinion, guards, and switch. (State phase of motor that will be used).

†Motors: 3 PH, 220-440V, 60 C.

	REPLACEMENT CUTTERS				RESHARPENING CHARGE			
	10	114	138*	112*	10	114	138*	112
Plain Cutter	$25.00	$40.00	$ 60.00	$ 90.00	$7.50	$ 9.00	$15.00	$22.00
Knurled Cutter	27.50	45.00	70.00	105.00	8.50	11.00	20.00	32.00
*Knurled Alloy Steel Cutter	38.50	65.00	100.00	150.00	8.50	11.00	20.00	32.00
Weight of Cutters					3 lbs. 4 oz.	7 lbs. 4 oz.	16½ lbs.	30 lbs.
Original Cutter Size (Plain or Knurled)					4¾"	6"	8⅛"	10⅛"
Single Cutter May Be Resharpened To (Plain or Knurled)					4"	5"	6½"	8"
Total Upper and Lower Cutters Must Equal (Minimum Diameter)					8¾"	11"	14⅝"	18⅛"

EXAMPLE: Using the No. 10 Shear — If one cutter is ground to 4" diameter, the second cutter must be 4¾" to equal minimum total diameter of 8¾". If the 2 cutters do not equal 8¾" diameter, a new cutter (either upper or lower) may be purchased to give the necessary minimum total diameter.

*For shearing stainless steel, we recommend an alloy steel knurled cutter — the plain cutter remains standard.

THROATLESS PRINCIPLE

As material passes thru the shear, the sheared sections separate going to the right and left and under and over the spiral shaped head.

The throatless feature places no limit on the width of the material to be sheared, and straight, irregular or circular patterns can be followed.

The upper cutter is knurled to feed the material and is driven, while the lower cutter is free to revolve in a sleeve.

* On No. 138 and No. 112 lower cutter is knurled and driven, upper cutter is plain and free to revolve.

The cutters are made of high grade tool steel, accurately ground and tempered. Maintenance or replacement cost is low.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

NOW!—NOTCHING IS EASY WHEN YOU USE THE NEW No. 200 POWER NOTCHER

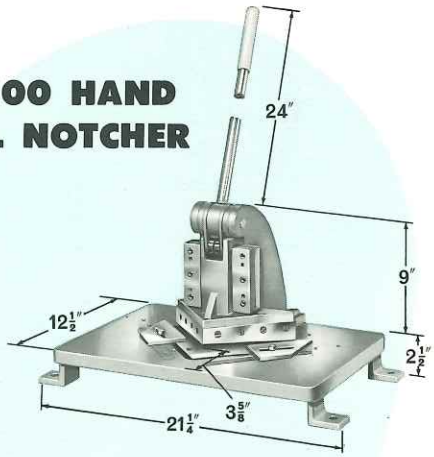
QUICK EASY LOWER BLADE ADJUSTMENT

HEAVY DUTY BEARINGS FOR SMOOTH EASY OPERATION

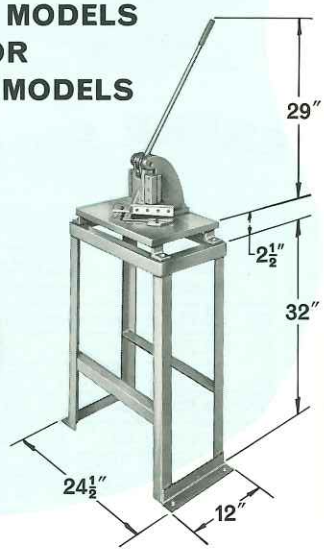
30° ANGLE RAM WITH ADJUSTABLE GIBS ASSURES POSITIVE BLADE ALIGNMENT

CONVENIENT FOOT PEDAL ACTION LEAVES BOTH HANDS FREE

No. 100 HAND METAL NOTCHER



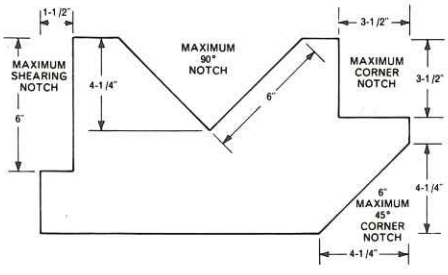
BENCH MODELS OR FLOOR MODELS



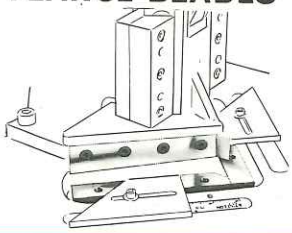
The No. 100 Notchers are actuated by an eccentric cam, rolling on an aviation type bearing. This assembly is linked to a press type ram held securely by 30° angle gibs insuring accuracy of the ram travel. Interchangeable to both models lower blades are adjustable. A 6″ scale is set on each side of the lower 90° blade and an adjustable gauge is mounted on each scale for quick, easy setups for duplicate notching. Blades, and parts are all replaceable. Examples of notching with the Nos. 100, 200 Notchers can be seen in the drawing. Standard equipment includes one set of 90° Blades.

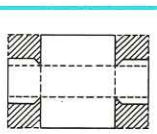
SPECIFICATIONS

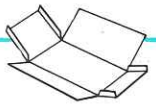
	No. 100	No. 200
Capacity — Mild Steel	6″ x 6″ x 90° Notch in 16 ga.	
Weight, Bench Model	110 lbs.	Not Avail
Weight, Floor Model	145 lbs.	615 lbs.
NET PRICES — F.O.B. FACTORY		
Bench Model, Standard Equipment	$220.00	Not Avail
Floor Model, Standard Equipment	242.00	$700.00
90° Upper Blades, Set of 2, for replacement	11.00	11.00
90° Lower Blades, Set of 2, for replacement	11.00	11.00
90° HSS Upper Blades, Set of 2, for replacement	22.00	22.00
90° HSS Lower Blades, Set of 2, for replacement	22.00	22.00
Special Box Flange Blades, Complete	44.00	44.00



SPECIAL BOX FLANGE BLADES



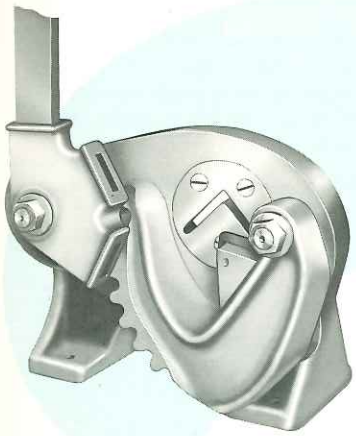


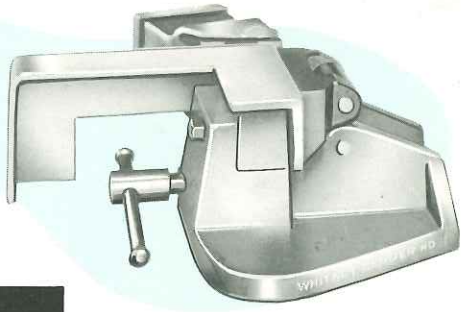


TRIM & NOTCH
BEND

Notching, to form boxes, can be accelerated with Special Box Flange Blades. These Special Box Flange Blades can be installed on any No. 100 or No. 200 Notchers. Sold only in sets.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE



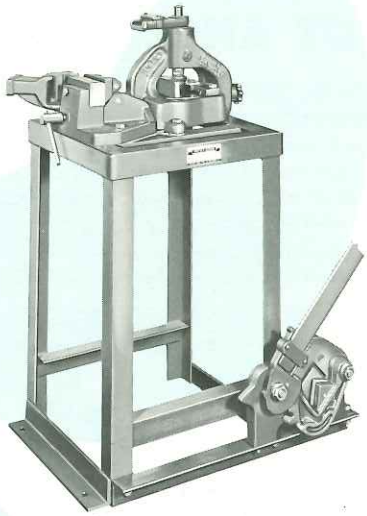


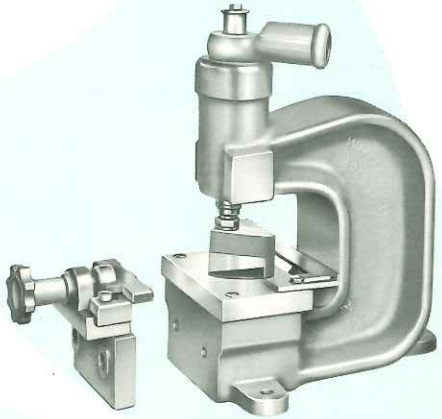
ON THE
FOLLOWING PAGES

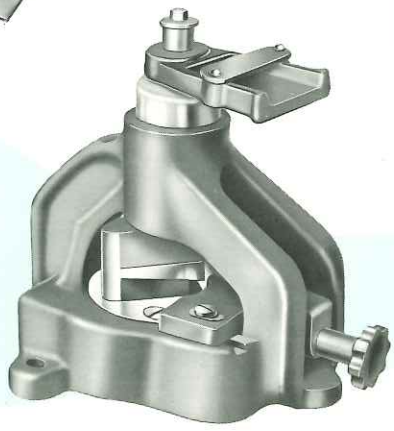
WHITNEY-JENSEN

ANGLE IRON TOOLS

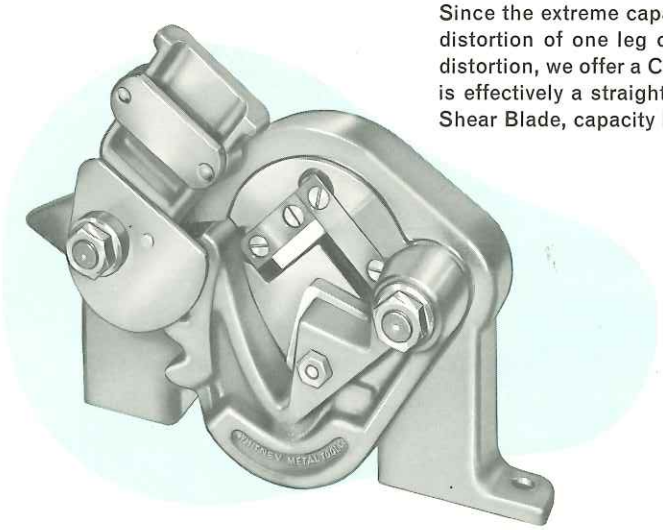
SHEARS
NOTCHERS
BENDERS







No. 4 ANGLE IRON SHEAR



Since the extreme capacity of this tool is accomplished by a shearing action, there is a bending-out or distortion of one leg of the angle iron when using the Standard Movable Shear Blade. To avoid this distortion, we offer a Contour Movable Shear Blade that will shear specified sizes of angle iron with what is effectively a straight cut having no distortion of the angle iron. However, with the Contour Movable Shear Blade, capacity is reduced to 2″ x 2″ x 3/16″ mild steel angle iron.

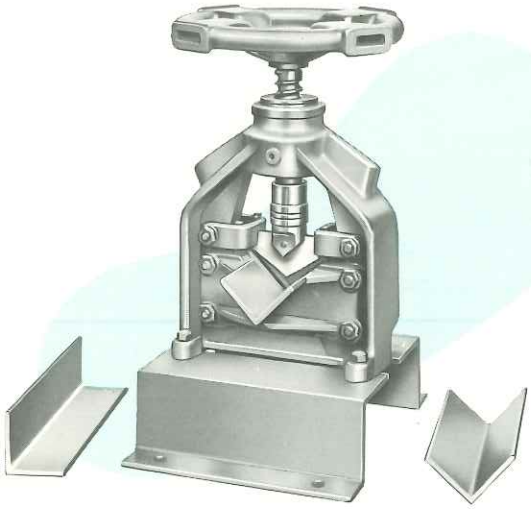
The No. 4 Contour Movable Shear Blade will shear mild steel angles, sizes as listed, without distorting the angle iron.
1/2″ x 1/2″ x 1/8″ — 3/4″ x 3/4″ x 1/8″ — 1″ x 1″ x 1/8″ — 1-1/4″ x 1-1/4″ x 1/8″
1-1/2″ x 1-1/2″ x 1/8″ — 1-3/4″ x 1-3/4″ x 1/8″ — 1″ x 1″ x 3/16″
1-1/4″ x 1-1/4″ x 3/16″ — 1-1/2″ x 1-1/2″ x 3/16″ — 1-3/4″ x 1-3/4″ x 3/16″
2″ x 2″ x 3/16″.

SPECIFICATIONS	
Capacity, All Sizes of Angle Iron, including	2″x2″x¼″
Height of Shear	10″
Length of Shear	13½″
Width of Shear (with Stock Support Stud in place)	7″
Weight, including 72″ Operating Bar Handle	49 lbs.
NET PRICES — F. O. B. FACTORY	
No. 4 Angle Iron Shear with Standard Blade	$71.50
No. 4 Angle Iron Shear with Contour Blade	71.50
No. 4 Angle Iron Shear with Blade for 2″x2″x⅛″ angle*	74.00
No. 4 Standard Shear Blade, for replacement	6.60
No. 4 Contour Shear Blade, for replacement	6.60
Special No. 4 Shear Blade for 2″x2″x⅛″, for replacement*	9.00
Base Shearing Blades (Two Pieces), for replacement	13.75
Base Shearing Die (Old Style Round), for replacement	17.25

*Shearing 2″ x 2″ x ⅛″ angle without distortion requires a Special Blade which also cuts other sizes as shown for Contour Blade.

No. 162 DOUBLE CUT ANGLE IRON SHEAR

The No. 162 Ball Bearing Double Cut Angle Iron Shear *will not distort either leg of the angle iron*. Note that angle legs *must be equal* (such as 2″ x 2″ x 1/8″ or 3″ x 3″ x 1/4″) or damage to blade and holder may result. Because of the *double cut action*, a 3/8″ long section of the angle is cut out and becomes scrap. One man can operate this shear to capacity. The Upper Blade and Lower Dies are replaceable, as well as all other parts. Shear is furnished on base as shown, together with one 72″ Operating Bar Handle.



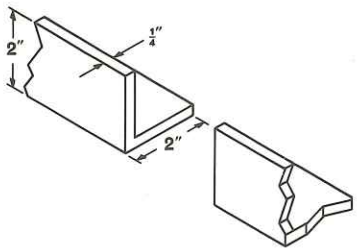
SPECIFICATIONS	
Capacity, All Sizes of Angle Iron, including	3″x3″x¼″
Height of Shear	21″
Length of Shear	11″
Width of Shear	7″
Weight, including 72″ Operating Bar Handle	142 lbs.
NET PRICES — F. O. B. FACTORY	
No. 162 Shear Complete	$225.00
Upper Shear Blade, for replacement	5.00
Lower Dies (four), for replacement	17.50

No. 62 ANGLE IRON SHEAR

This Shear will distort one end of the angle being sheared; however, this distortion may be overcome by several blows with a hammer. This shear is furnished with a 72″ Operating Bar Handle. Full cut requires Handle be inserted, in turn, in all three sockets.

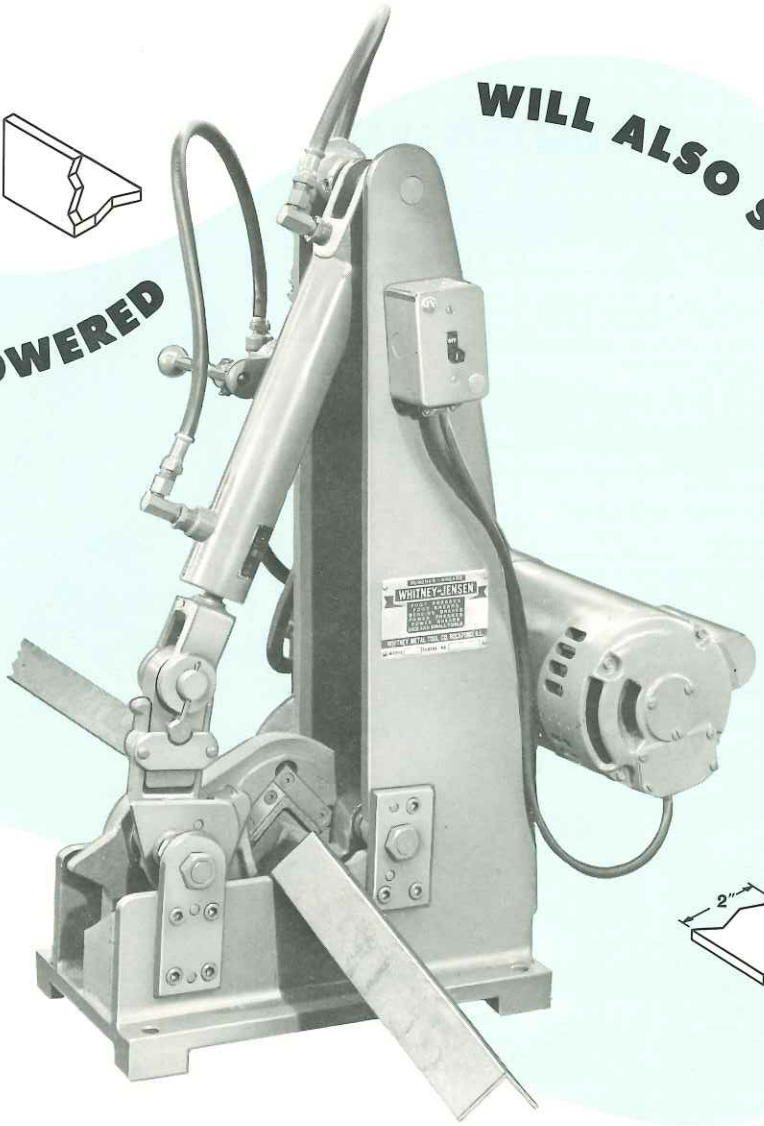
SPECIFICATIONS	
Capacity, All Sizes of Angle Iron, including	3″ x 3″ x ¼″
Height of Shear	14″
Length of Shear	18″
Width of Shear (with stock support in place)	11″
Weight including 72″ Operating Bar Handle	162 lbs.
NET PRICES — F. O. B. FACTORY	
No. 62 Shear with 72″ Operating Bar Handle	$165.00
Movable Shear Blade, for replacement	12.00
Base Shearing Die, for replacement	30.00

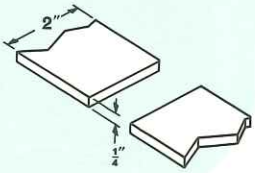
No. HP4 ANGLE IRON SHEAR



HYDRAULIC-POWERED

WILL ALSO SHEAR FLATS





9 SECONDS TO SHEAR

SPECIFICATIONS

Capacity, All Sizes of Angle Iron, including	2" x 2" x 1/4"
Capacity, Flats, Mild Steel, thru	2" x 1/4"
Time Required to Shear	9 sec.
Motor	1 HP, 1725 RPM, 110-220V, 1 PH, or 220-440V, 3 PH
Height Overall	30"
Floor Space Required	18" x 26"
Weight with Motor	243 lbs.

NET PRICES — F. O. B. FACTORY

No. HP4 Angle Iron Shear with 1 PH Motor*	$525.00
No. HP4 Angle Iron Shear with 3 PH Motor*	550.00
No. HP4 Movable Shear Blade, for replacement	6.60
No. HP4 Shearing Dies (per Set), for replacement	13.75

*These Shears are not available without motors.

The No. HP4 Hydraulic-Powered Angle Iron Shear will shear all sizes of mild steel angles thru 2" x 2" x 1/4" without distortion. The entire unit is mounted on a fabricated frame, easily moved in the shop or to the job site. We are sure you will find the HP4 Hydraulic-Powered Angle Iron Shear an efficient, inexpensive, trouble-free machine for shearing angle iron.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

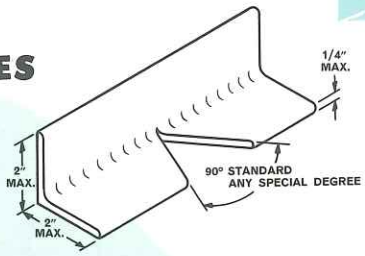
No. 50 ANGLE IRON NOTCHER

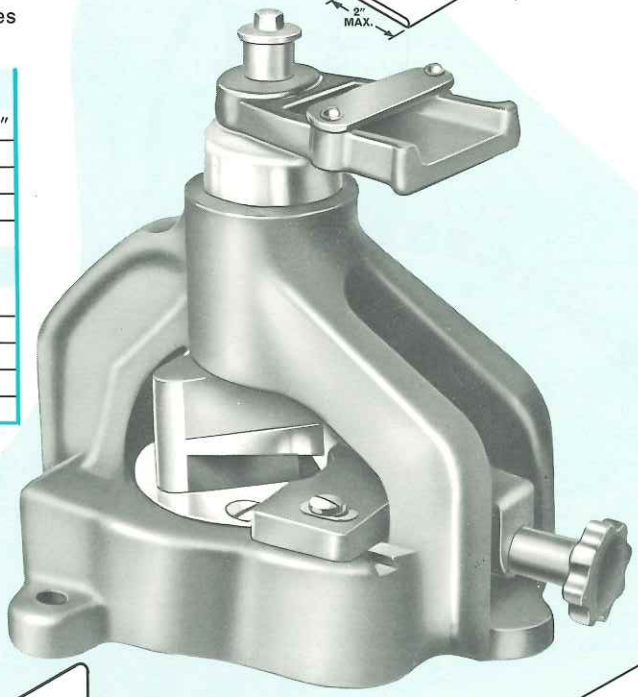
The No. 50 Angle Iron Notcher is a useful tool for notching or coping angle iron; it can be used in the shop or on the job site. Standard equipment includes one 32" Operating Bar Handle and 90° Blade and Die. Coping and Special Degree Notching Blades and Dies are available.

SPECIFICATIONS	
Capacity, All Sizes of Angle Iron, including	2" x 2" x ¼"
Height Overall	12"
Width Overall	9½"
Length Overall	13"
Weight, including 32" Operating Bar Handle	55 lbs.
NET PRICES — F. O. B. FACTORY	
No. 50 Angle Iron Notcher with Standard Equipment	$137.50
No. 50 90° Upper Blade, for replacement	5.50
No. 50 90° Lower Die, for replacement	25.00
No. 50 Special Degree Unit (State Desired Angle)*	90.00
No. 50 Coping Unit (State Size. Max. 2" x 1⅞")*	90.00

*Includes Blade, Die, and Blade Holder.

NOTCHES





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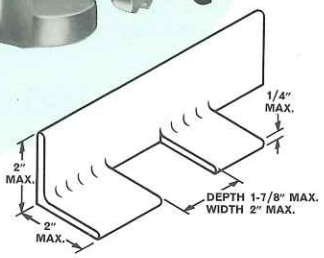

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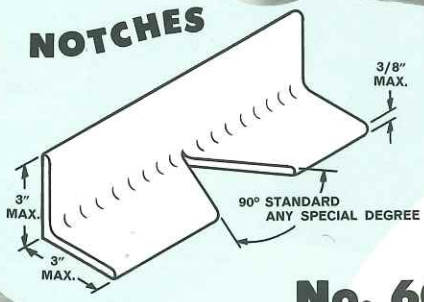

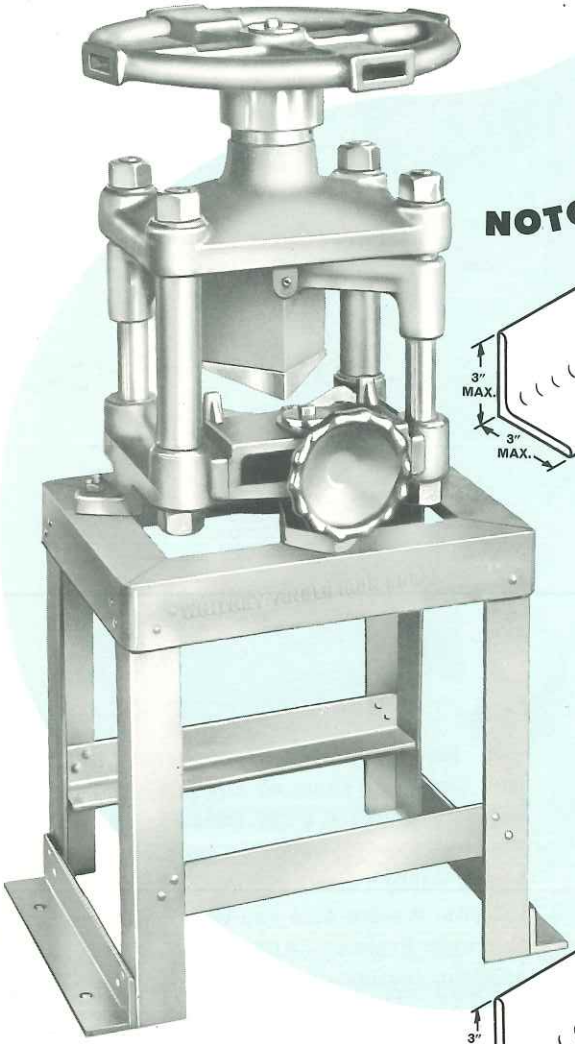

No. 60 ANGLE IRON NOTCHER

The No. 60 Angle Iron Notcher is very useful in notching or coping angle iron beyond the capacity of the No. 50 Angle Iron Notcher. Standard equipment includes 90° Notching Blade and Die, one 32" Operating Bar Handle, mounted on angle iron stand. Special Degree Notching Blades and Dies, and Coping Blades and Dies, are also available.

SPECIFICATIONS	
Capacity, All Sizes of Angle Iron, including	3" x 3" x ⅜"
Height Overall	37"
Width Overall	13"
Length Overall	17"
Weight, including 32" Operating Bar Handle	229 lbs.
NET PRICES — F. O. B. FACTORY	
No. 60 Angle Iron Notcher with Standard Equipment	$300.00
No. 60 Upper Blade 90°, for replacement	20.00
No. 60 Lower Die 90°, for replacement	33.00
No. 60 Special Degree Unit (State Desired Angle)*	94.00
No. 60 Coping Unit (State Size. Max. 3" x 3")*	94.00

*Includes Blade, Die, and Blade Holder

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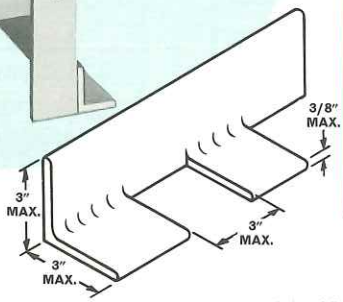
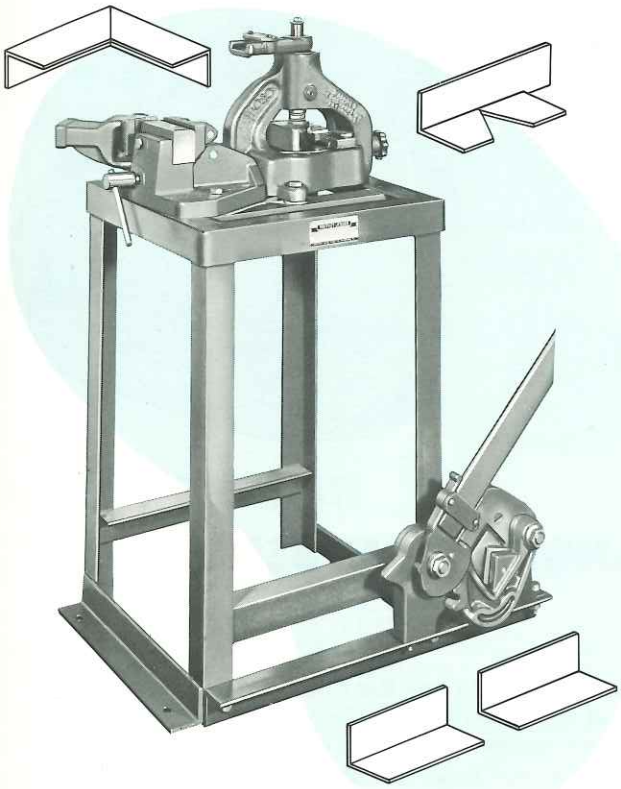


PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. 455 ANGLE IRON COMBINATION



SHEAR - NOTCHER - BENDER

The No. 455 Angle Iron Combination consists of one No. 4 Angle Iron Shear, one No. 50 Angle Iron Miter Notcher, and one No. 51 Angle Iron Bender, all mounted on an angle iron stand (as shown), together with one 72" Operating Bar Handle.

This entire unit is very useful where angle iron is fabricated. It is adaptable for out on the job location or stationary in the shop.

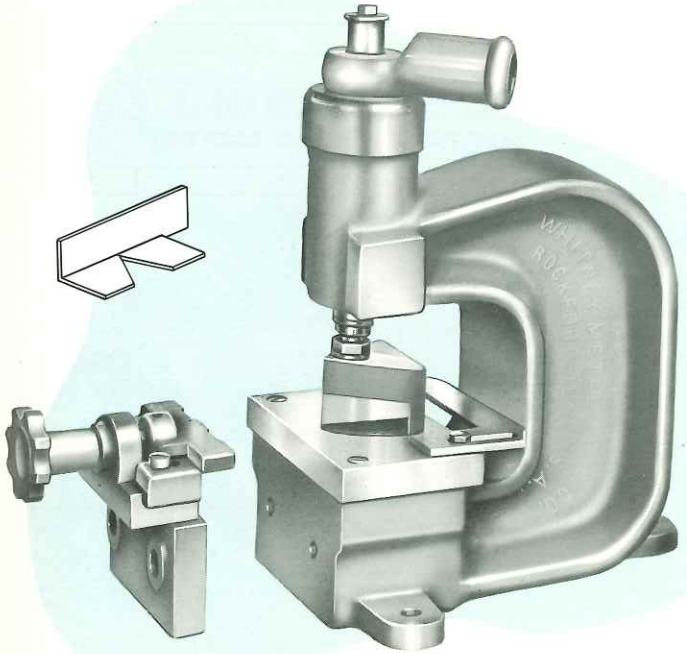
SPECIFICATIONS

Capacity, All Sizes of Angle Iron, including	2" x 2" x ¼"
Height Overall	33"
Floor Space Required	21½" x 26"
Weight	200 lbs.

NET PRICE — F. O. B. FACTORY

No. 455 Combination Shear - Notcher - Bender	$300.00

No. 49 BALL BEARING ANGLE IRON PUNCHER



The No. 49 Ball Bearing Notcher notches and copes angles as well as flats up thru 1-1/2" x 3/16". Special Degree Notching Blades and Dies of any angle required also furnished. The maximum size Coping Blade and Die available is 1-1/2" x 1-1/2". A piece of standard 3/4" pipe, of desired length, may be inserted in the Operating Handle and used as a lever. The Front Bracket Gauge shown is furnished as standard equipment, together with 90° Blade and Die.

SPECIFICATIONS

Capacity, Mild Steel, Angle and Flats	1½" x 1½" x 3/16"
Height Overall	14"
Length Overall	11"
Width Overall	8"
Weight of Front Bracket Gauge	5 lbs.
Weight of No. 49 Notcher	60 lbs.

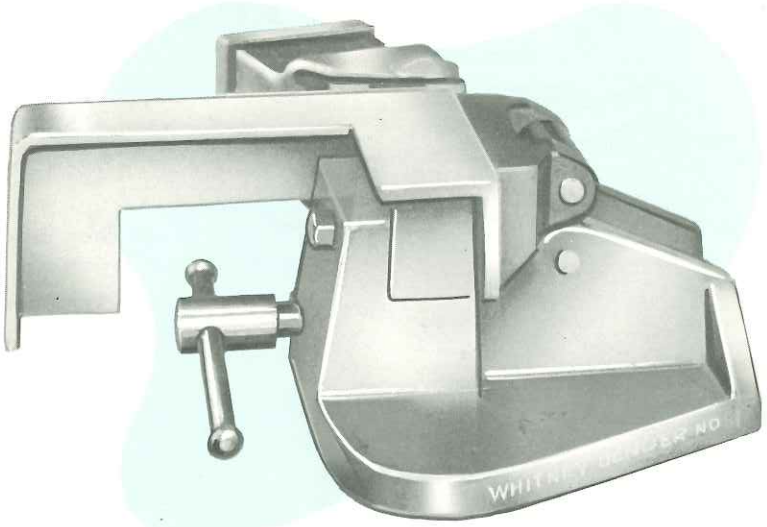
NET PRICE — F. O. B. FACTORY

No. 49 Notcher with Standard Equipment	$150.00
No. 49 Upper Blade 90°, for replacement	5.50
No. 49 Lower Die 90°, for replacement	25.50
No. 49 Special Degree Unit (State Desired Angle)*	75.00
No. 49 Coping Unit (State Size, Max. 1½" x 1½")*	75.00

*Includes Blade, Die, and Blade Holder

No. 51 ANGLE IRON BENDER

The No. 51 Angle Iron Bender, a companion tool to the No. 4 Angle Iron Shear and No. 50 Angle Iron Miter Notcher, will bend all sizes, through capacity, of angle iron as well as flat bars. Standard equipment includes one 32" Operating Bar Handle.

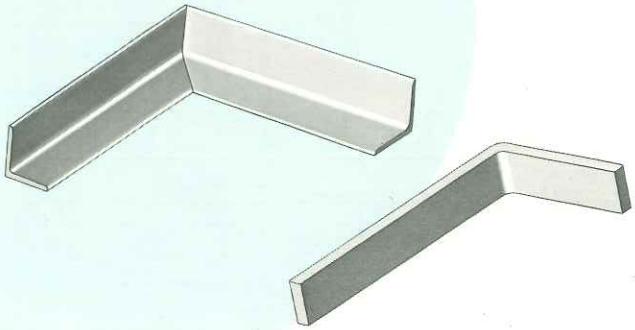


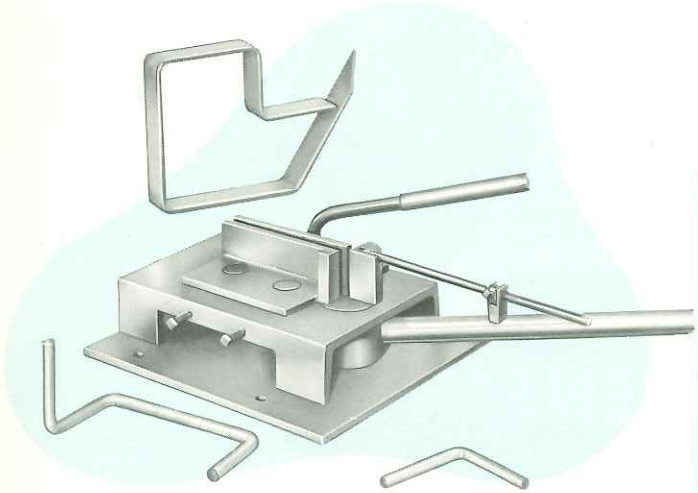
SPECIFICATIONS	
Capacity, All Sizes of Angle Iron, including	2" x 2" x ¼"
Height Overall	5"
Width Overall	10"
Length Overall	15"
Weight, including 32" Operating Bar Handle	50 lbs.
NET PRICE — F. O. B. FACTORY	
No. 51 Angle Iron Bender with Handle	$60.50

No. 61 ANGLE IRON BENDER

The No. 61 Angle Iron Bender, a companion tool to the No. 62 and No. 162 Angle Iron Shears and No. 60 Angle Iron Miter Notcher, will bend all sizes, through capacity, of angle iron as well as flat bars. Standard equipment includes four 18" Operating Bar Handles and angle iron stand.

SPECIFICATIONS	
Capacity, All Sizes of Angle Iron, including	3" x 3" x ⅜"
Height Overall	29"
Width Overall	13"
Length Overall	19½"
Weight, including Stand and Handles	205 lbs.
NET PRICE — F. O. B. FACTORY	
No. 61 Bender, with Stand and Handles	$300.00





No. 52 BENDER

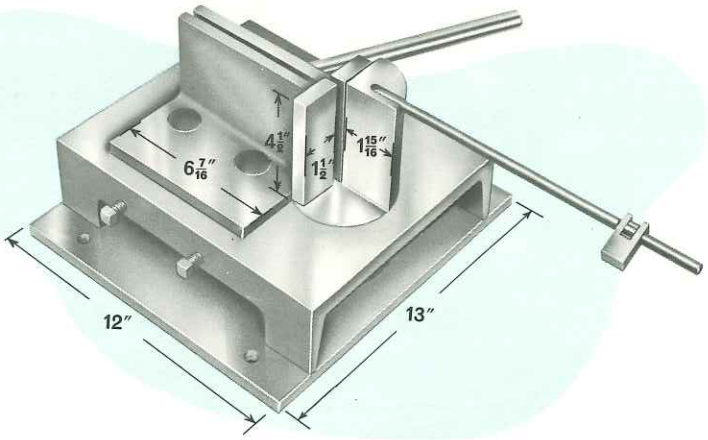
The No. 52 Bender is easy to operate, fast, and ruggedly built. After initial setting, patented adjustment automatically compensates for the thickness of metal, and will always produce good square bends in round solid bars, flats, and angles. An adjustable gauge, maximum extension 12", is provided for duplicating bends. A 30" Operating Bar Handle is furnished with each Bender.

SPECIFICATIONS	
Capacity, Mild Steel	½" Round Solid Bars ¼" x 2" Flat Bars ¼" x 2" Notched Angle Iron
Minimum Square Obtainable	6½" x 6½", Height 2"
Minimum Rectangle Obtainable	6½" x 1", Height 1¾" 6½" x 3¼", Height 2"
Height Overall	7½"
Width Overall	12"
Length Overall	13½"
Weight with 30" Operating Bar Handle	58 lbs.
NET PRICE — F. O. B. FACTORY	
No. 52 Bender with 30" Operating Bar Handle	$60.50

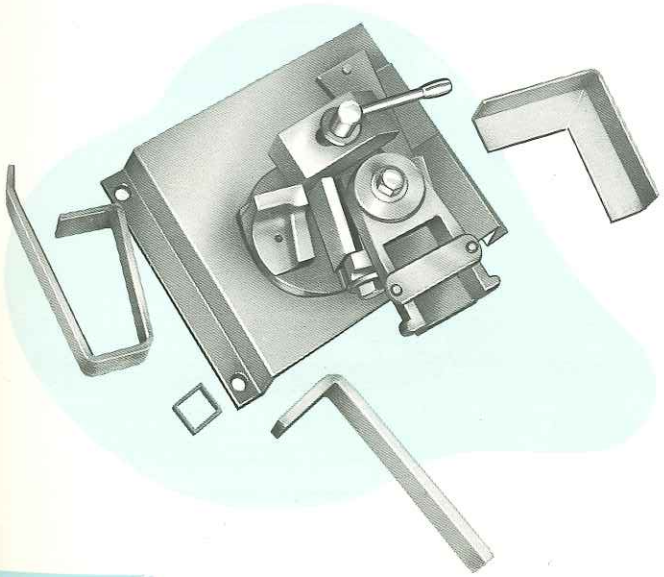
No. 152 BENDER

SPECIFICATIONS	
Capacity	Mild Steel ⅝" Round Solid Bars Mild Steel ¼" x 2½" Flat Bars Aluminum ¼" x 4" Flat Bars Copper ¼" x 4" Flat Bars Mild Steel ¼" x 2" Notched Angle Iron
Minimum Square Obtainable	7" x 7" x 4"
Minimum Rectangle Obtainable	2" x 7" x 3½" 4" x 7" x 4"
Height Overall	8"
Width Overall	13"
Length Overall	12"
Weight with 48" Bar Handle	75 lbs.
NET PRICE — F. O. B. FACTORY	
No. 152 Bender with 48" Bar Handle	$100.00

The No. 152 Bender is similar in design and operation to the No. 52 Bender, varying mainly in capacity. The No. 152 Bender has greater capacity, thereby permitting a larger range of work such as forming copper buss bar up to ¼" x 4". After initial setting, patented adjustment automatically compensates for the thickness of metal and will produce bends with a minimum radius. An adjustable gauge will aid in duplicating bends. A 48" solid round Bar Handle is furnished with each tool.

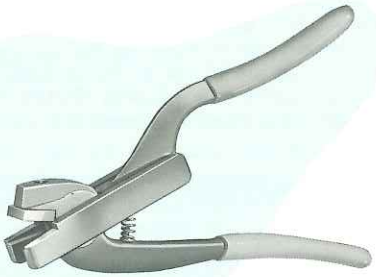


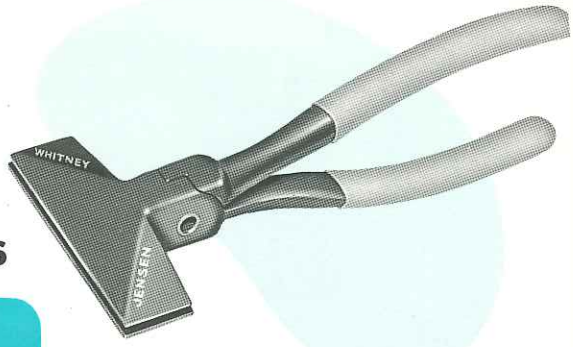
No. 53 UNIVERSAL BENDER



The No. 53 Universal Bender serves usefully in the shop, forming flat bars and angles to desired shapes. A 72" Operating Bar Handle is furnished with the No. 53 Universal Bender.

SPECIFICATIONS	
Capacity, Mild Steel	2½" x 2½" x ⅜" Notched Angle Iron 2" x ½" Flat Bars
Minimum Square Obtainable	3" x 3"
Minimum Rectangle Obtainable	2¼" x 3"
Height Overall	6½"
Width Overall	12"
Length Overall	15½"
Weight with 72" Operating Bar Handle	75 lbs.
NET PRICE — F.O.B. FACTORY	
No. 53 Universal Bender with 72" Operating Bar Handle	$ 99.00



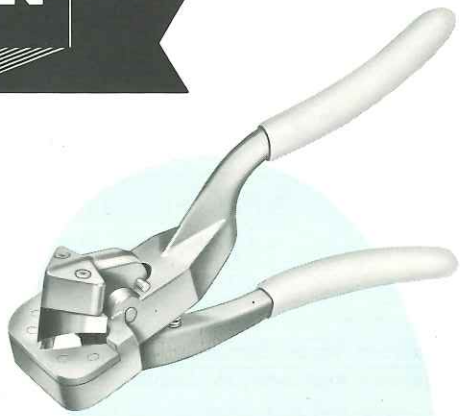


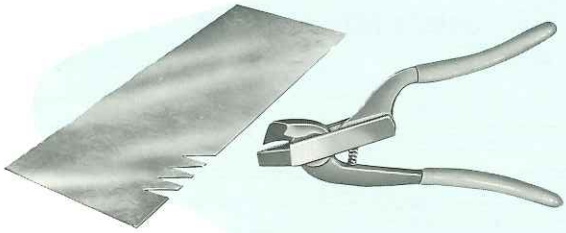
ON THE
FOLLOWING PAGES

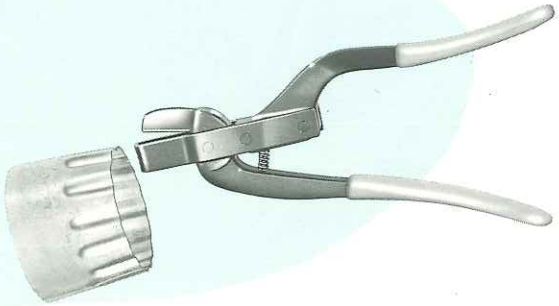
WHITNEY-JENSEN

HAND TOOLS

FOR VARIOUS
SHEET METAL
OPERATIONS







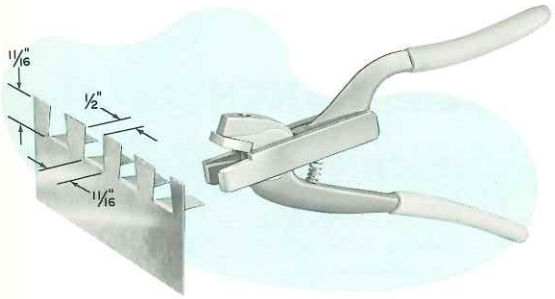
PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

No. 44 HAND SEAMER

SPECIFICATIONS and NET PRICE — F.O.B. FACTORY

Depth of Throat	1″
Width of Jaws	3½″
Length Overall	8″
Weight	1 lb.
Net Price	$6.50

One of the handiest tools for comparatively light work. Wide deep jaws are machined for smooth parallel fit. Produces neat, tight folds and seams. Strong, lasting construction.



No. 121 DOVETAIL NOTCHER

SPECIFICATIONS and NET PRICE — F.O.B. FACTORY

A light, fast-working, handy-size tool for dovetailing during installation of collars, stubs, Y-joints, etc. Spring-return jaws. Cuts notch and folds tab down square in one easy motion.

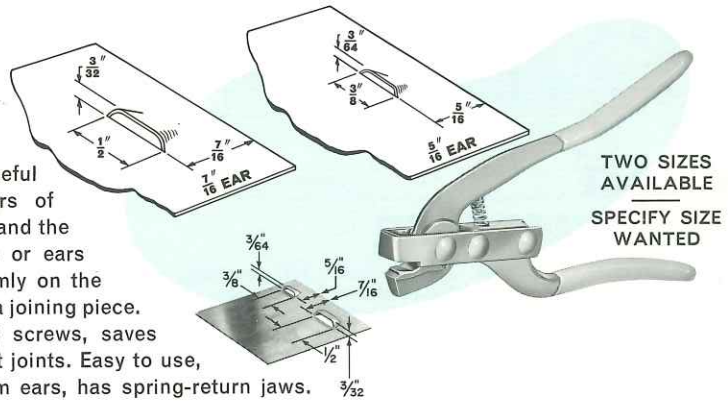
Capacity	20 ga. mild steel
Size of Notch	illustrated
Length Overall	8½″
Weight	1 lb.
Net Price	$8.50

Nos. 131-5/16″ and 131-7/16″ SNAP LOCK PUNCHES

SPECIFICATIONS and NET PRICE — F.O.B. FACTORY

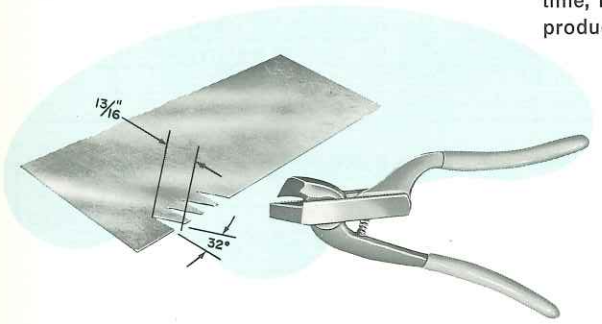
Capacity	20 ga. mild steel
Location of Ear (2 sizes)	illustrated
Length Overall	8½″
Weight	1 lb.
Net Price No. 131-5/16″	$8.50
Net Price No. 131-7/16″	8.50

An extremely useful tool for installers of ducts, furnaces, and the like. Forms lugs or ears that will lock firmly on the seamed edge of a joining piece. Reduces use of screws, saves time, makes tight joints. Easy to use, produces uniform ears, has spring-return jaws.



TWO SIZES AVAILABLE

SPECIFY SIZE WANTED



No. 141 HAND NOTCHER

SPECIFICATIONS and NET PRICE — F.O.B. FACTORY

Ingeniously designed for fast, accurate work. Hook design of jaws permits notching to exact desired depth without slippage and with minimum effort. Spring-return jaws.

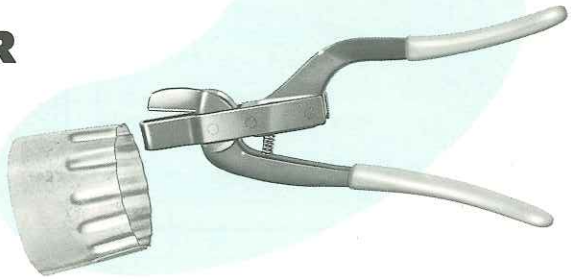
Capacity	20 ga. mild steel
Angle of Notch	32°
Maximum Depth of Notch	13/16″
Length Overall	9″
Weight	1 lb.
Net Price	$8.50

No. 111 HAND PIPE CRIMPER

SPECIFICATIONS and NET PRICE — F.O.B. FACTORY

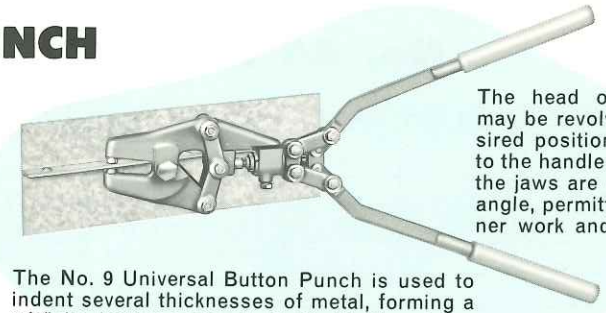
Depth of Throat	1⅛″
Length Overall	9″
Weight	1 lb.
Net Price	$8.50

A handy tool for pipe crimping in the shop or out on the job. Main parts of tool are drop forgings, not stampings.



No. 9 UNIVERSAL BUTTON PUNCH

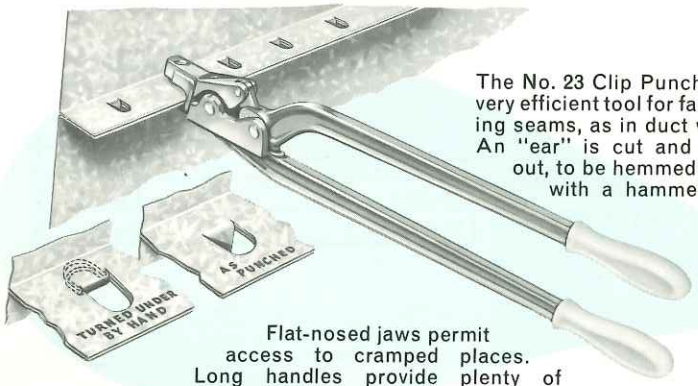
SPECIFICATIONS	
Capacity, 3 thicknesses of Mild Steel	20 ga.
Depth of Throat	1¾"
Height of Throat	⅝"
Length Overall	26"
Weight	10 lbs.
NET PRICES — F. O. B. FACTORY	
No. 9 Universal Button Punch	$50.00
No. 9 Punch, for replacement	1.40
No. 9 Die, for replacement	1.40



The head of this Punch may be revolved to any desired position with respect to the handles. The ends of the jaws are offset at a 30° angle, permitting close corner work and a clear view.

The No. 9 Universal Button Punch is used to indent several thicknesses of metal, forming a 3/8" dia. button or dimple that holds the pieces together securely. A common use is on standing seams on roofs, to make a watertight fastening.

No. 23 CLIP PUNCH



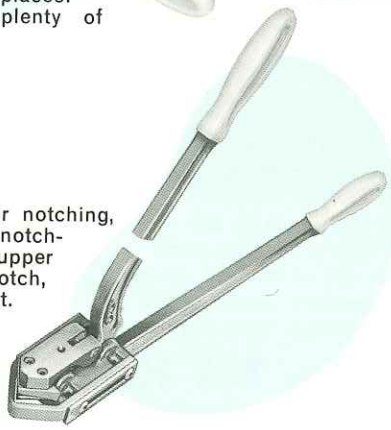
The No. 23 Clip Punch is a very efficient tool for fastening seams, as in duct work. An "ear" is cut and bent out, to be hemmed tight with a hammer.

Flat-nosed jaws permit access to cramped places. Long handles provide plenty of power for efficient work.

SPECIFICATIONS	
Capacity, 3 thicknesses of Mild Steel	24 ga.
Depth of Throat	1"
Length Overall	21"
Weight	6 lbs.
NET PRICES — F. O. B. FACTORY	
No. 23 Clip Punch	$33.00
No. 23 Punch, for replacement	3.25
No. 23 Die, for replacement	2.75

No. 241 HAND NOTCHER

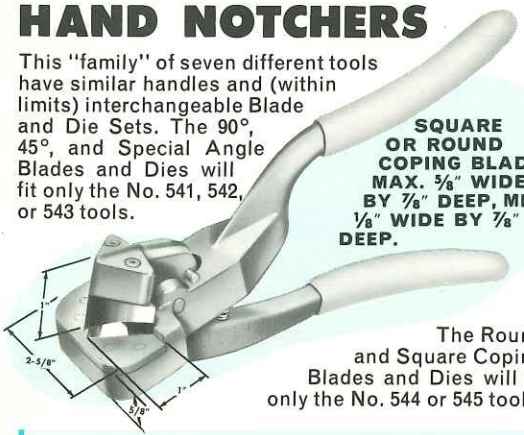
The No. 241 Hand Notcher can be used for notching, coping, and corner shearing. It is excellent for notching counter moulding. The hooked form of the upper blade permits accurate control of depth of notch, prevents slippage, and produces a shearing cut. A kit is available to make this tool into a bench-mounted, foot-operated tool.



SPECIFICATIONS	
Capacity, Max. Depth of Notch, Mild Steel	16 ga.
Angle of Notch	90°
Depth of Notch, Maximum	1"
Length Overall	21"
Weight No. 241 Hand Metal Notcher	7 lbs.
Weight No. 241 Foot Treadle Parts	8½ lbs.
Weight No. 241 Bench Base	1½ lbs.
NET PRICES — F. O. B. FACTORY	
No. 241 Hand Metal Notcher	$33.00
No. 241 Upper Notcher Blade, for replacement	6.00
No. 241 Lower Notcher Die, for replacement	6.00
No. 241 Foot Treadle Parts, Complete Set	18.00
No. 241 Bench Base	8.00

No. 541 SERIES HAND NOTCHERS

This "family" of seven different tools have similar handles and (within limits) interchangeable Blade and Die Sets. The 90°, 45°, and Special Angle Blades and Dies will fit only the No. 541, 542, or 543 tools.

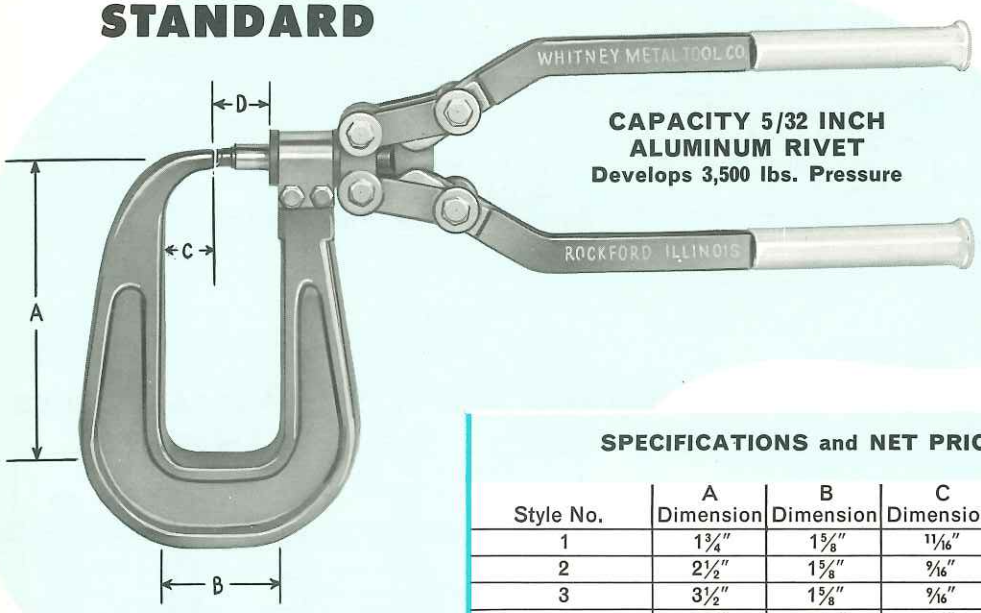


The Round and Square Coping Blades and Dies will fit only the No. 544 or 545 tools.

SPECIFICATIONS	
Capacity, Mild Steel	20 ga.
Length Overall	9 in.
Weight	2 lbs.

NET PRICES — COMPLETE TOOLS — F.O.B. FACTORY		
No. 541	90° Hand Notcher with 90° Blade and Die	$15.00
No. 542	45° Hand Notcher with 45° Blade and Die	15.00
No. 543	Special Angle Hand Notcher (Specify Angle between 90° and 30°)	35.00
No. 544	Square Coping Hand Notcher (⅝" W x ⅞" D Standard)	35.00
No. 544S	Square Coping Special Hand Notcher (State Size Wanted)	35.00
No. 545	Round Coping Hand Notcher (⅝" W x ⅞" D Standard)	35.00
No. 545S	Round Coping Special Hand Notcher (State Size Wanted)	35.00
NET PRICES — BLADES AND DIES ONLY — F.O.B. FACTORY		
No. 541	90° Upper Blade	$ 5.25
No. 541	90° Lower Die	2.00
No. 542	45° Upper Blade	6.50
No. 542	45° Lower Die	2.00
No. 543	Special Angle Blade and Die — State Angle desired (Set only)	25.00
No. 544	Square Coping Upper Blade (⅝" W x ⅞" D Standard)	15.00
No. 544	Square Coping Lower Die (⅝" W x ⅞" D Standard)	10.00
No. 544S	Special Square Coping Blade and Die—State Size desired (Set only)	25.00
No. 545	Round Coping Upper Blade (⅝" W x ⅞" D Standard)	15.00
No. 545	Round Coping Lower Die (⅝" W x ⅞" D Standard)	10.00
No. 545S	Special Round Coping Blade and Die—State Size desired (Set only)	25.00

STANDARD



CAPACITY 5/32 INCH ALUMINUM RIVET
Develops 3,500 lbs. Pressure

The Whitney-Jensen Standard Aircraft Rivet Squeezer develops extreme power through its compound toggle action, minimizing size and weight. The frame or the handles may be rotated to any desired working position. Our Aircraft Rivet Squeezers are widely used by the leading aircraft manufacturers and also in many hangars for maintenance work. One set of riveting dies, of your choice, are sent with each tool. Each rivet type requires an individual frame.

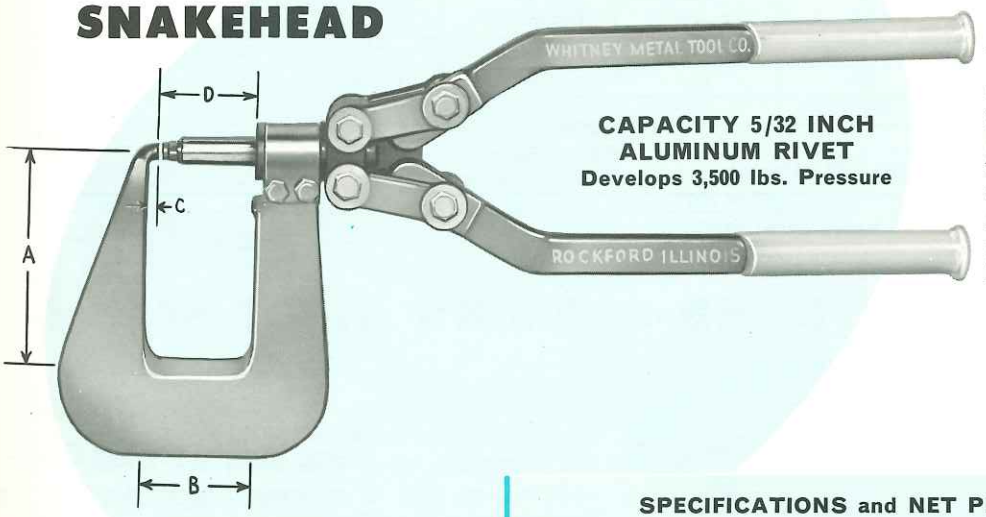
SPECIFICATIONS and NET PRICES — F.O.B. FACTORY

Style No.	A Dimension	B Dimension	C Dimension	D Dimension	Weight	Length Overall	Price Each
1	1¾″	1⅝″	11/16″	⅞″	5½ lbs.	17″	$45.00
2	2½″	1⅝″	9/16″	⅞″	6 lbs.	17″	50.00
3	3½″	1⅝″	9/16″	⅞″	6½ lbs.	17″	52.00
4	2⅞″	1 3/16″	½″	⅝″	6 lbs.	17″	45.00
5	6″	2¼″	1″	1″	10 lbs.	18½″	72.00
6	4″	1⅝″	7/16″	1⅛″	7½ lbs.	18½″	58.00
7	5″	1⅝″	7/16″	1⅛″	8 lbs.	18½″	65.00
8	8″	2½″	½″	1⅞″	16½ lbs.	20″	95.00
9	10″	2¾″	7/16″	2⅛″	25½ lbs.	20″	125.00
10	12″	2 11/16″	7/16″	2 3/16″	32 lbs.	20″	135.00
Handle Assembly Only					4½ lbs.	14½″	32.50
Riveting Die (Be sure to mention type of Rivet Head)							2.50

IMPORTANT

We must know the *type of Rivet Head, Diameter of Rivet,* and *Thickness of Material to be Riveted* to fill your order correctly. If this information is not available, send a sample of your rivet. Tubular Riveting Die not applicable to this tool.

SNAKEHEAD



CAPACITY 5/32 INCH ALUMINUM RIVET
Develops 3,500 lbs. Pressure

The Whitney-Jensen Snakehead Type Aircraft Rivet Squeezers are of the same design as the Standard Aircraft Rivet Squeezers, varying only in the fact that this tool may be used for close corner work. The frame and handles may be rotated to any desired working position. Each rivet type requires an individual frame.

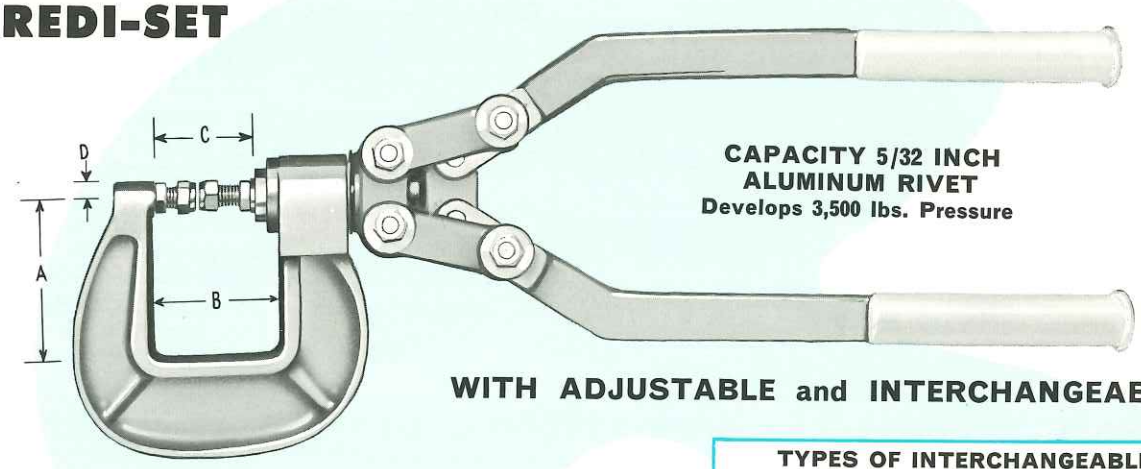
SPECIFICATIONS and NET PRICES — F.O.B. FACTORY

Style No.	A Dimension	B Dimension	C Dimension	D Dimension	Weight	Length Overall	Price Each
Gz-3-11	2½″	1⅛″	3/16″	13/16″	7 lbs.	16¼″	$95.00
Gz-3-12	4¼″	2¼″	3/16″	1⅞″	9½ lbs.	18½″	115.00
Handle Assembly Only					4½ lbs.	14½″	32.50
Riveting Die (Be sure to mention type of Rivet Head)							2.50

IMPORTANT

We must know the *type of Rivet Head, Diameter of Rivet* and *Thickness of Material to be Riveted* to fill your order correctly. If this information is not available, send a sample of your rivet. Tubular Riveting Die not applicable to this tool.

REDI-SET



CAPACITY 5/32 INCH ALUMINUM RIVET
Develops 3,500 lbs. Pressure

WITH ADJUSTABLE and INTERCHANGEABLE DIES

The Redi-Set Aircraft Rivet Squeezers may be used to set any type of a rivet; the dies are interchangeable, the riveting plane may be raised or lowered, and the jaws may be revolved to any desired position.

Tool is furnished less the riveting dies. Be sure to state the type of head and the size of the rivet you plan to use.

Submit sample rivet when ordering Tubular Riveting Dies.

MADE ONLY FOR 3/32", 1/8", and 5/32" RIVETS

TYPES OF INTERCHANGEABLE DIES

FLUSH, OR FLAT HEAD | ROUND HEAD AN430 | BRAZIER HEAD AN455 | MODIFIED BRAZIER HEAD AN456 | FOR COUNTER-SINKING

SPECIFICATIONS and NET PRICES — F.O.B. FACTORY

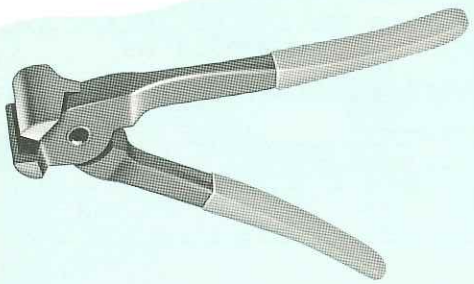
Style No.	A Dimension	B Dimension	C Dimension	D Dimension	Weight	Length Overall	Price Each
DA-1	1¾"	2"	1⅝"	5/16"	6 lbs.	18½"	$45.00
DA-2	2½"	2"	1⅝"	5/16"	6½ lbs.	18½"	50.00
DA-5-1	6"	2"	1⅝"	5/16"	9 lbs.	18½"	55.00
Handle Assembly Only					4½ lbs.	14½"	32.50
Riveting Dies, Per Set (Be Sure to Mention Type of Rivet Head)							3.80
Countersinking Dies, Per Set (State Angle of Rivet Head) 78° or 100°							9.30
Tubular Riveting Dies, Per Set (Submit Sample Rivets With Order)							6.50

HAND-FORMING RIVET SETS

These rivet sets are heat treated and the riveting head surfaces are polished to protect the rivet head when it is being set. *When ordering, be sure to state the type of rivet head you plan to use.*

SPECIFICATIONS and NET PRICES — F.O.B. FACTORY

Size	Type of Rivet Head	Length	Dia.	Weight	Price
3/32", 1/8", 5/32", or 3/16"	Brazier, Modified Brazier, or Round	4⅞"	5/8"	6 oz.	$1.80



No. 42 HAND BENDER

SPECIFICATIONS and NET PRICE — F.O.B. FACTORY

A heavy duty hand bending tool having capacity to form heavier gauges of metal. Narrow jaws (1-3/4" width) permit accessibility in cramped areas.

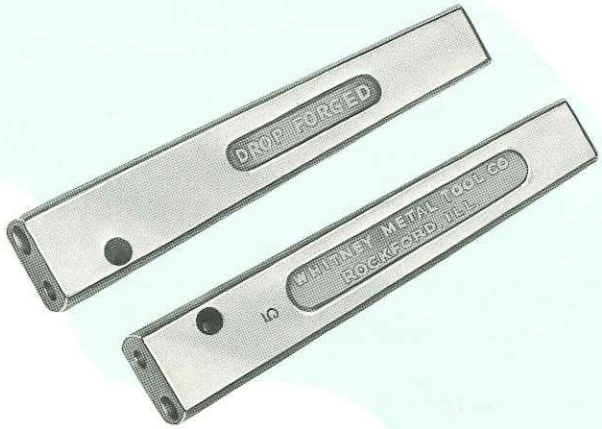
Depth of Throat	½"
Width of Jaws	1¾"
Length Overall	8½"
Weight	1¼ lbs.
Net Price	$7.25

RIVET SETS

DROP FORGED — HARDENED

SPECIFICATIONS AND NET PRICES — F.O.B. FACTORY

Size	Hole Size Inches	Iron Rivets Lbs.	Copper Rivets Nos.	Weight	Net Price Each
00	.3125	14 & 16	—	14 oz.	$2.50
0	.2812	10 & 12	5	14 oz.	2.50
1	.2343	7 & 8	6	10 oz.	2.00
2	.2130	6	7	10 oz.	2.00
3	.1910	4 & 5	8	10 oz.	1.75
4	.1660	3 & 3½	9	6 oz.	1.75
5	.1495	2 & 2½	10 & 11	6 oz.	1.50
6	.1405	1½ & 1¾	12	6 oz.	1.50
7	.1285	1 & 1¼	13 & 14	4 oz.	1.50
8	.1100	10 & 12-oz.	15	4 oz.	1.50



GROOVING TOOLS

DROP FORGED — HARDENED

USED FOR FLATTENING AND OFFSETTING FOLDED EDGES TO MAKE A LOCK SEAM

SPECIFICATIONS AND NET PRICES — F.O.B. FACTORY

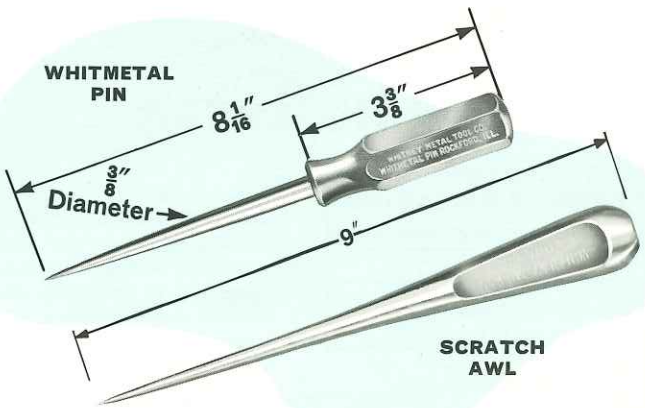
Size, No.	00	0	1	2	3	4	5	6	7	8
Size, inches	½"	7/16"	3/8"	5/16"	¼"	7/32"	3/16"	5/32"	9/64"	⅛"
Weight, oz.	18	18	18	18	14	14	14	14	14	14
Price	$2.25	$2.25	$2.25	$2.25	$2.00	$2.00	$2.00	$2.00	$2.00	$2.00

PLASTIC HANDLE WHITMETAL PIN and A1 SCRATCH AWL

DROP FORGED — HARDENED

SPECIFICATIONS AND NET PRICES — F.O.B. FACTORY

	Length	Weight	Net Price Each
Whitmetal Pin	8 1/16"	3½ oz.	$1.35
A-1 Scratch Awl	9"	8 oz.	$1.65



ROUND HANDLE SOLID PUNCHES No. 00

Stock Sizes—3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 13/32", 7/16", 15/32", 1/2", 5/8".

SPECIFICATIONS and NET PRICE — F.O.B. FACTORY	
Length Overall	6"
Weight, Each Size	8 oz.
Diameter	5/8"
Net Price, Each Size	$1.50

CHANGEABLE HANDLE HOLLOW PUNCHES

Complete Set includes Wood Case.

SPECIFICATIONS and NET PRICES — F.O.B. FACTORY

SET No. 1

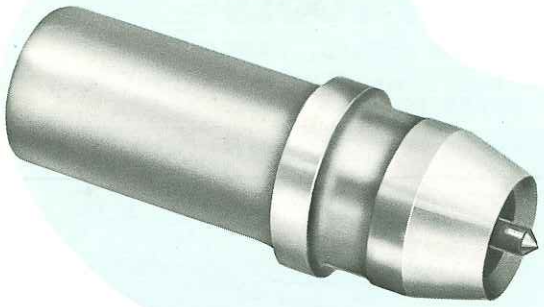
Punch Sizes, Set No. 1	3/8"	1/2"	5/8"	3/4"	7/8"
Net Price, Punch Only	.$75	$1.00	$1.25	$1.50	$1.75
Net Price, Handle Only					2.50
Net Price, Center Point and Spring Only					.75
Net Price, Complete Set in Wood Case					12.00
Weight					2½ lbs.

SET No. 2

Punch Sizes, Set No. 2	1"	1¼"	1½"	1¾"	2"
Net Price, Punch Only	$3.50	$3.75	$4.00	$4.25	$4.50
Net Price, Handle Only					5.25
Net Price, Center Point and Spring Only					.75
Net Price, Complete Set in Wood Case					30.00
Weight					7½ lbs.

SET No. 3

Punch Sizes, Set No. 3	2¼"	2½"	2¾"	3"
Net Price, Punch Only	$5.50	$5.75	$6.00	$6.75
Net Price, Handle Only				5.25
Net Price, Center Point and Spring Only				.75
Net Price, Complete Set in Wood Case				35.00
Weight				11½ lbs.



ONE-PIECE HOLLOW PUNCH No. 4

Stock Sizes — 7/8", 15/16", 1", 1-1/16", 1-1/8", 1-3/16", 1-1/4", 1-5/16", 1-3/8", 1-7/16" 1-1/2", 1-9/16", 1-5/8".

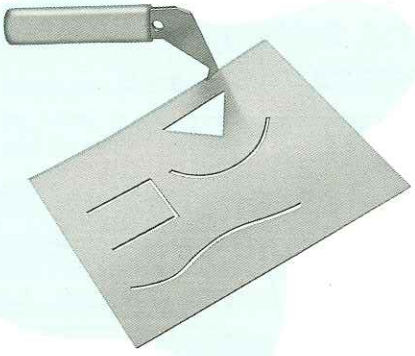
NET PRICES — F.O.B. FACTORY

Punch Sizes	7/8"	15/16"	1"	1 1/16"	1 1/8"	1 3/16"
Net Price, Each Punch	$5.50	$5.50	$5.50	$5.50	$5.50	$5.50
Punch Sizes	1¼"	1 5/16"	1 3/8"	1 7/16"	1½"	1 9/16"	1 5/8"
Net Price, Each Punch	$6.75	$6.75	$6.75	$6.75	$6.75	$6.75	$6.75
Net Price, Replacement Center Point and Spring Only, for any size							$.75

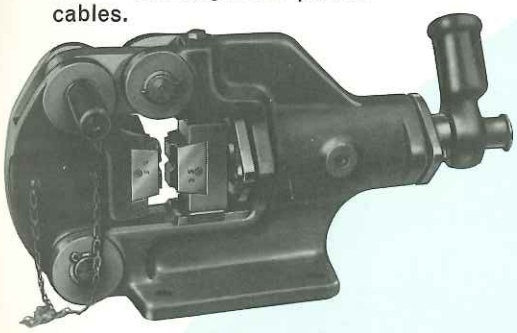
No. 14 RIPPING SHEAR

SPECIFICATIONS and NET PRICE — F.O.B. FACTORY	
Capacity	24 ga. mild steel
Length Overall	7¾"
Weight	4 oz.
Net Price	$2.25

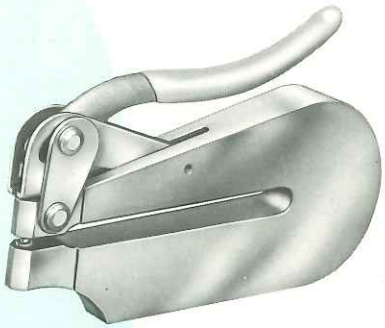
A handy tool for correcting errors in light gauges of sheet metal. A light blow with a hammer will insert the shearing point and successive blows will shear on a scribed line completing an impossible job in a matter of minutes. Approximately a 3/32" strip of metal is removed in the shearing operation.



Special portable squeezing tool with powerful screw-press action, used for compressing coupling sleeves on aluminum highline power cables.

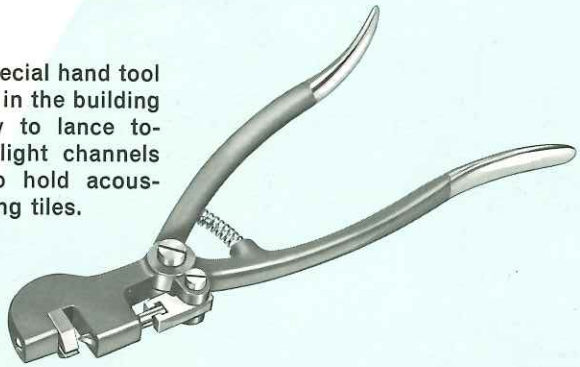


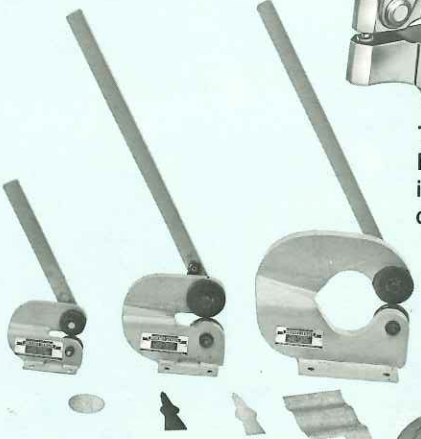
Redi-Set Rivet Squeezer kit made up specially for the Air Force, and including an extra-large assortment of interchangeable dies.



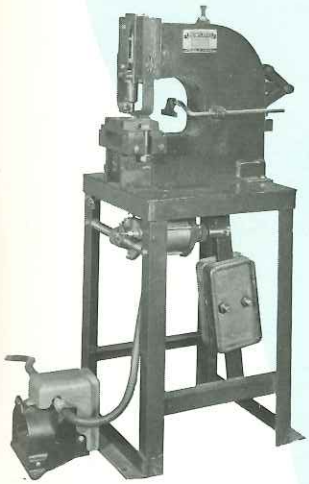
The mechanism of the familiar No. 5 Jr. Punch is here built into a special frame with deep throat.

This special hand tool is used in the building industry to lance together light channels used to hold acoustic ceiling tiles.

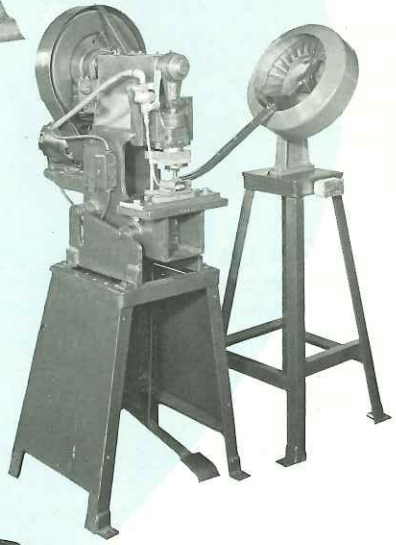




Three versions of an experimental scroll shear with throatless cutting action.



Showing how a Foot Press can be stretched to provide a throat depth of four feet, for punching out large templates.

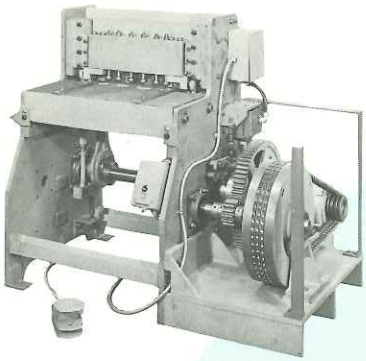


In answer to frequent requests for a powered operator for a small kick press, this is one example of how it can be done.

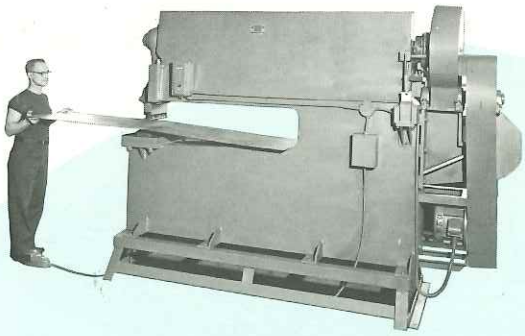
Special punch-action powered cutting tool used for trimming and slitting the output of a wide-range heavy wire-screen welding machine.

Automatic feed and air-blast ejection applied to a No. 127 Power Punch Press, for swaging both ends of a small switch part.

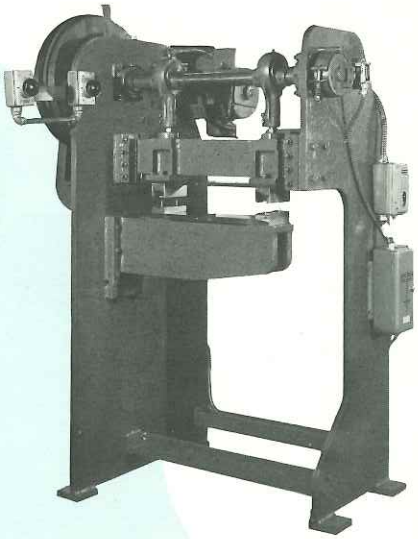
Special deep-throat power punch press designed for punching out the rings used in the afterburner of a jet engine.



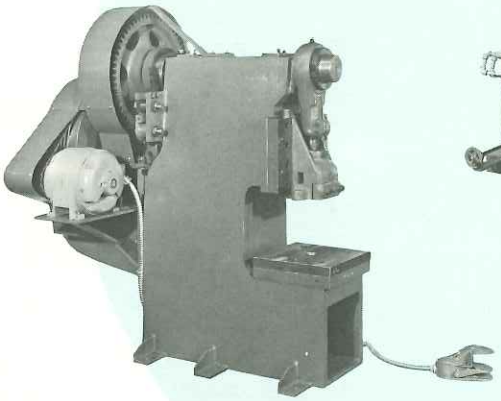
Special shear for cutting off and squaring the ends of heavy zinc bars on their way to a punch press.



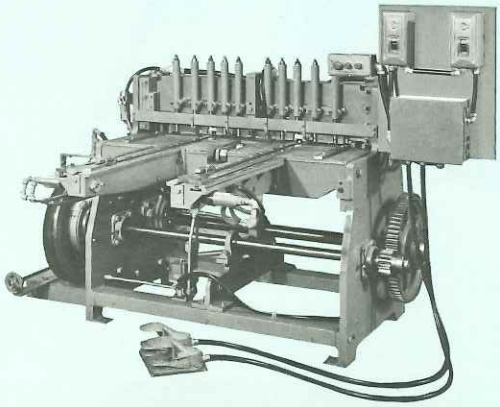
Enlarged punch press of the No. 336 type with 48″ throat depth, for cutting out window openings in metal fire doors.



This completely special machine attaches stacking cleats to office equipment used for temporary filing.

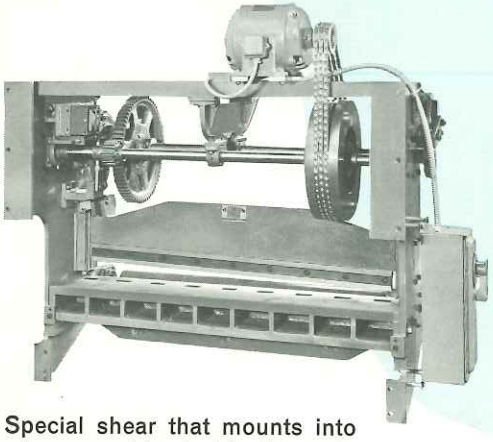


One of two power presses adjustable to each other, for punching holes in the web of heavy I-beams.

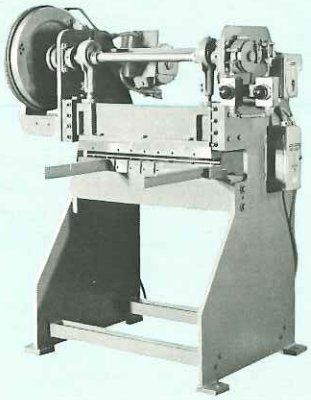


Squaring shear converted to automatic operation, used for cutting strips of lithographed metal that will become clips in a steel strapping machine.

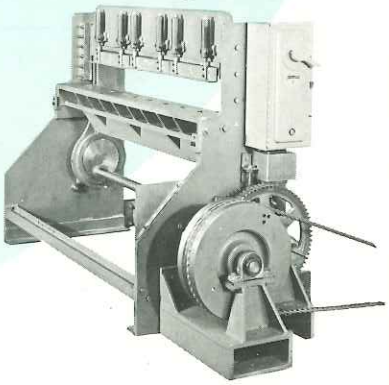
Modified 20-ton Power Press with Throat extended to 36″, for trimming panels out of large sheets without edge distortion.



Special shear that mounts into a large machine to trim the ends of sheet metal from rolls preparatory to welding.



Another special machine for operations on office equipment, in this case for clinching together parts of file drawers.



High speed squaring shear that cuts off a moving strip of linoleum to lengths, with high clearance to permit humping of strip to pass through.

DECIMAL EQUIVALENTS

Fraction	Decimal	Drill Size	Sheet Metal Gauge	Fraction	Decimal	Drill Size	Sheet Metal Gauge	Fraction	Decimal	Drill Size	Sheet Metal Gauge	Fraction	Decimal	Drill Size	Sheet Metal Gauge
1/64	.01563				.1015	38			.201	7			.386	W	
	.0164		27		.104	37		13/64	.20313			25/64	.39063		
	.0179		26		.1046		12		.204	6			.397	X	
	.0209		25		.1065	36			.2055	5			.404	Y	
	.0239		24	7/64	.10938				.2092		5	13/32	.40625		0000
	.0269		23		.110	35			.209	4			.413	Z	
	.0299		22		.111	34			.213	3		27/64	.42188		
1/32	.03125				.113	33		7/32	.21875			7/16	.4375		00000
	.0329		21		.116	32			.221	2		29/64	.45313		
	.0359		20		.1196		11		.2242		4	15/32	.46875		000000
	.040	60			.120	31			.228	1		31/64	.48438		
	.041	59		1/8	.125				.234	A		1/2	.500		0000000
	.0418		19		.1285	30		15/64	.23438			33/64	.51563		
	.042	58			.1345		10		.238	B		17/32	.53125		
	.043	57			.136	29			.2391		3	35/64	.54688		
	.0465	56			.1405	28			.242	C		9/16	.5625		
3/64	.04688			9/64	.14063				.246	D		37/64	.57813		
	.0478		18		.144	27		1/4	.250	E		19/32	.59375		
	.052	55			.147	26			.257	F		39/64	.60938		
	.0538		17		.1495	25	9		.261	G		5/8	.625		
	.055	54			.152	24		17/64	.26563		2	41/64	.64063		
	.0595	53			.154	23			.266	H		21/32	.65625		
	.0598		16	5/32	.15625				.272	I		43/64	.67188		
1/16	.0625				.157	22			.277	J		11/16	.6875		
	.0635	52			.159	21			.281	K		45/64	.70313		
	.067	51			.161	20		9/32	.28125		1	23/32	.71875		
	.0673		15		.1644		8		.290	L		47/64	.73438		
	.070	50			.166	19			.295	M		3/4	.750		
	.073	49			.1695	18		19/64	.29688			49/64	.76563		
	.0747		14	11/64	.17188				.302	N		25/32	.78125		
	.076	48			.173	17		5/16	.3125		0	51/64	.79688		
5/64	.07813				.177	16			.316	O		13/16	.8125		
	.0785	47			.1793		7		.323	P		53/64	.82813		
	.081	46			.180	15		21/64	.32813			27/32	.84375		
	.082	45			.182	14			.332	Q		55/64	.85938		
	.086	44			.185	13			.339	R		7/8	.875		
	.089	43		3/16	.1875			11/32	.34375		00	57/64	.890625		
	.0897		13		.189	12			.348	S		29/32	.90625		
	.0935	42			.191	11			.358	T		59/64	.921875		
3/32	.09375				.1935	10		23/64	.35938			15/16	.9375		
	.096	41			.1943		6		.368	U		61/64	.953125		
	.098	40			.196	9		3/8	.375		000	31/32	.96875		
	.0995	39			.199	8			.377	V		63/64	.984375		

COMPUTATION OF PUNCHING PRESSURES

Use this equation: Circumference (periphery) of hole (in inches) multiplied by the thickness of metal (in inches) multiplied by tensile strength of metal (in pounds per square inch) equals punching pressure required.

Example: To find punching pressure required to punch a 1" round hole thru 16 gauge mild steel—1" multiplied by 3.1416 (circumference) multiplied by .0598 (16 gauge) multiplied by 50,000 pounds (tensile strength) equals 9,817.5 pounds pressure required or approximately 5 tons.

Example: To find punching pressure required to punch a 1-1/2" square hole thru 20 gauge stainless steel — 1-1/2" + 1-1/2" + 1-1/2" + 1-1/2" (circumference) multiplied by .0359 (20 gauge) multiplied by 90,000 pounds (tensile strength) equals 22,500 pounds pressure required or approximately 11 tons.

Punching pressure required may be reduced by approximately one-half if shear is milled on the punch or die. Shear does not aid in reducing punching pressures when the metal is 1/4" or more in thickness.

PRESSURES REQUIRED FOR PUNCHING ROUND HOLES IN MILD STEEL

HOLE DIAMETER		1/8"	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	11/16"	3/4"	13/16"	7/8"	15/16"	1"
Metal Ga.	In.	PRESSURE IN TONS														
28	.015"	.2	.2	.3	.4	.4	.5	.6	.7	.7	.8	.9	1.0	1.1	1.2	1.3
26	.018"	.2	.3	.4	.4	.5	.6	.7	.8	.9	1.0	1.1	1.1	1.2	1.3	1.4
24	.024"	.2	.4	.5	.6	.7	.8	.9	1.1	1.2	1.3	1.4	1.5	1.6	1.8	1.9
22	.030"	.3	.4	.6	.7	.9	1.0	1.2	1.3	1.5	1.6	1.8	1.9	2.1	2.2	2.4
20	.036"	.4	.5	.7	.9	1.1	1.2	1.4	1.6	1.8	1.9	2.1	2.3	2.5	2.6	2.8
18	.048"	.5	.7	.9	1.2	1.4	1.6	1.9	2.1	2.4	2.6	2.8	3.1	3.3	3.5	3.8
16	.062"	.6	.9	1.2	1.5	1.8	2.1	2.3	2.6	2.9	3.2	3.5	3.8	4.1	4.4	4.7
14	.075"	.7	1.1	1.5	1.8	2.2	2.6	2.9	3.3	3.7	4.0	4.4	4.8	5.1	5.5	5.9
12	.105"	1.0	1.5	2.1	2.6	3.1	3.6	4.1	4.6	5.1	5.7	6.2	6.7	7.2	7.7	8.2
11	.120"	1.2	1.8	2.4	2.9	3.5	4.1	4.7	5.1	5.9	6.2	7.1	7.6	8.3	8.8	9.4
10	.135"	1.3	2.0	2.6	3.3	4.0	4.6	5.3	5.9	6.6	7.3	7.9	8.6	9.2	9.9	10.6
5/32"	.156"		2.3	3.1	3.8	4.6	5.4	6.1	6.9	7.7	8.4	9.2	10.0	10.7	11.5	12.3
3/16"	.188"		2.8	3.7	4.6	5.5	6.4	7.4	8.3	9.2	10.1	11.0	12.0	12.9	13.8	14.8
1/4"	.250"			4.9	6.1	7.4	8.6	9.8	11.1	12.3	13.5	14.7	16.0	17.2	18.4	19.7
3/8"	.375"					11.1	12.8	14.8	16.5	18.5	20.2	22.1	23.8	25.8	27.5	29.5
1/2"	.500"							19.7	22.0	24.6	26.9	29.5	31.8	34.4	36.8	39.4
5/8"	.625"									30.8	33.7	36.9	39.9	43.0	46.0	49.2
3/4"	.750"											44.3	47.7	51.7	55.2	59.0
1"	1.000"															80.0

POWER PRESS BRAKE PRESSURES

TONS PRESSURE REQUIRED PER LINEAL FOOT TO FORM 90° BEND IN MILD STEEL

Metal Gauge	WIDTH OF FEMALE DIE OPENING																
	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 3/8"	1 1/2"	1 3/4"	2"	2 1/4"	2 1/2"	2 3/4"	3"
20	2.43	1.62	1.21	.97	.81	.69	.61										
18	4.32	2.88	2.16	1.73	1.44	1.23	1.08	.97	.86								
16		4.50	3.38	2.70	2.25	1.93	1.69	1.50	1.35	1.23	1.12						
14		7.00	5.25	4.20	3.50	3.00	2.63	2.34	2.10	1.91	1.75	1.50	1.31				
12			10.3	8.20	6.84	5.86	5.13	4.56	4.10	3.73	3.42	2.93	2.57	2.28	2.05		
11				10.8	9.00	7.72	6.75	6.00	5.40	4.90	4.50	3.86	3.37	3.00	2.70	2.45	
10				13.5	11.3	9.68	8.47	7.52	6.78	6.16	5.64	4.84	4.23	3.76	3.39	3.08	2.82

IMPORTANT

When ordering Punches and Dies, please specify the type and thickness of material so that proper clearance can be incorporated.

When placing an order or requesting a quotation for Punches and Dies, please specify the make and model number of the machine on which the Punches and Dies will be used.

One complete revolution (360°) of the operating handle of a No. 10, 11, 12, 20, CTL 20, 24, 25, 027, or 40 Punch lowers the punch 1/2".

APPROXIMATE MULTIPLIER FOR PRESSURES FOR OTHER METALS

METAL TYPE		MULTIPLIER
Aluminum	1/2 Hard	.38
Brass	1/2 Hard	.70
Copper	Sheet	.56
Steel	50 Carbon	1.40
Steel	Cold Rolled	1.20
Stainless Steel 18-8		1.40

EXAMPLE —
1" Round Hole Thru 28 ga. Aluminum, 1/2 Hard.
1.3 x .38 = .494 Tons

RECOMMENDED HOLE SIZE FOR SELF-TAPPING METAL SCREWS

SHEET METAL TYPE		FINE THREAD SCREW	
Size	Dia. Hole	Size	Dia. Hole
#2	.078	2-56	.073
#4	.098	4-40	.096
#6	.111	6-32	.116
#7	.120	8-32	.147
#8	.136	10-32	.173
#10	.157	1/4-20	.234
#12	.185	10-24	.177
#14	.209		

TONS PRESSURE REQUIRED TO SHEAR 1" LENGTH

Metal Gauge	Mild Steel	Stainless Steel	Brass
20	1.01	1.50	.75
18	1.25	1.75	1.00
16	1.75	2.50	1.25
13	2.50	3.50	2.00
11	3.25	4.75	2.25
3/16"	4.25	7.00	3.25
1/4"	6.25	9.50	4.50
5/16"	8.00	12.00	5.50
3/8"	9.50	14.25	6.25
7/16"	11.00	16.50	7.75
1/2"	12.50	18.75	8.75
5/8"	15.75	23.50	11.00
3/4"	18.75	28.25	13.25
7/8"	22.00	33.00	15.50
1"	25.00	37.50	17.50

FOR LENGTHS LONGER THAN 1"—
MULTIPLY LENGTH BY TONNAGE.

EXAMPLE —
Pressure Required to Shear 6" of 20 ga. Mild Steel.
6" × 1.01 = 6.06 Tons.

PRICES AND PRODUCTS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE

MINIMUM CHARGE ORDER $1.50

TERMS
ALL PRICES NET, F.O.B. FACTORY
ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE
CASH DISCOUNTS
1% 10th and 25th PROX., NET 30 DAYS

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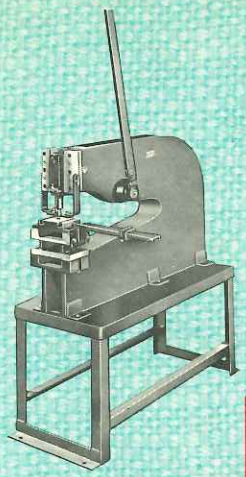

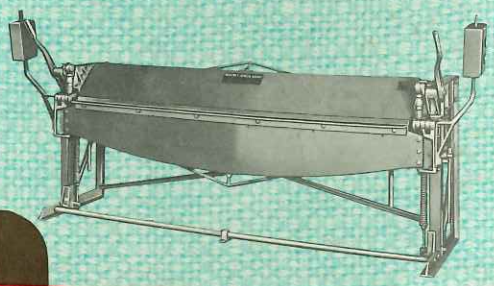

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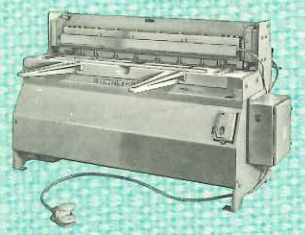

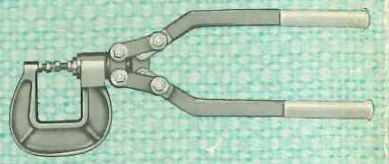

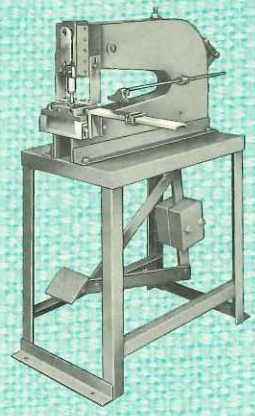

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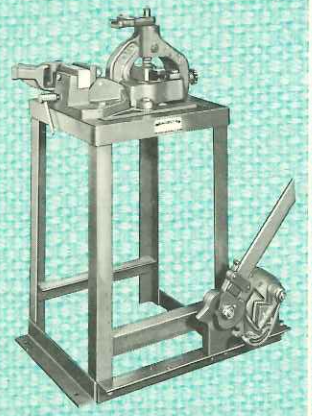

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